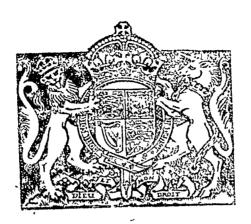
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GOVERNMENT OF INDIA RAILWAY DEPARTMENT

(RAILWAY BOARD)



Report by the Railway Board

ON

INDIAN RAILWAYS

FOR

1941-42

Volume I

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Books and Technical Papers published by the Railway Board.

BOOKS.

- (1) Report by the Railway Board on Indian Railways. Published yearly. Price-Volume I.-Report, Ra. 3-0.0 or 5sh. Volume II, Rs. 7-0.0 or 11sh. [1940-41]
- (2) Classified List of State Railway Establishment and Distribution Return of Establishment of all Railways corrected up to 31st December 1941 Price Rs. 3-12-0 or 6s.
- (3) History of Indian Railways, constructed and in progress corrected up to 31st March 1939. Published sexennially. Price Rs. 4-10- or 7s. 3d.

TECHNICAL PAPERS.

- (4) Over 310 papers have been published by the Technical Section of the Railway Board's Office. The papers comprise :-
 - (a) Original descriptions of railway works and studies of railway problems in India and elsowhere.
 - (b) Reprints of articles from foreign engineering magazines.
 - (c) Reprints or abstracts of reports rec. ived by the Government of India on subjects connected with railways.

A complete list of the papers can be obtained gratis from the Chief Controller, Standardisation, Central Standards Office for Railways, New Delhi. A few of the more important Technical papers are mentioned below:—

		•					•		
l'echnica Paper.	,	, Name.	`				•		Author.
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٠,,	219	Technical education in relation to railway	e in A	merica					H. L. COLE.
"	239	The Central Control systems for the scheen repairs workshops in England .	luling •	of opera	tions :	in loc	omoti	•	H. H. SAUNDERS.
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,,	243	How to judge the prospects of new railway	ays.	•					LtCol. L. E. HOPKINS.
,,		Sleeper spacing and the effect of the new		issible A	xle-los	ads		•	A. F. HARVEY,
"	245	Report of the Indian Railway Bridge Cor	nmitte	ee on tra	ick str	06808.			
; ;;	247	lst and 2nd interim reports of the India Impact and revision of the Bridge r		way Br	idgo (Comm	ittoo	on	
**	249	Operating Statistics and the Divisional O	Micer		•	•	•		Major F. H. BUDDEN.
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**	251	A. R. E. and maintenance of Way Assoc Bridges. (Reprinted.)	iation	's Impa	ct test	no a	Rail	ra y	, ,
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Main statistics compared for four years

I .- All Indian railways (Classes I. II and III).

Itema.			,	1038-39	¹ 1930-40.	114041.	1941-42
Gross earnings	*	•	(crores) Rs. , '	107-15	111-50	126-34	144-69
Total Working expenses			(crarrs) Rs	71-18	72-20	73-19	60-32
Operating ratio			per cent	66-44	64-75	57-92	55-51
Number of passenger originating .	•		(millions)	530-62	529-67	575-72	623-07
Earnings from carriage of passengers .	•		(crores) Ils	30.73	30-47	34-14	39.69
Average carnings per passenger mile .	•		Pies	3-15	2-16	3-29	3.46
Preight tons originating			(millions) .	88-36	92-18	92-78	97-00
Earnings from earriage of goods .			(crores) Rs	68-37	72-56	81-45	89-63
Average carnings per freight ton mile			Pies .	• 5-98	5.83	6-19	€-14
Total train miles			(millions) .	197-04	109-84	200.90	206-18
Gross earnings per train mile			Rr.	5.40	5.64	6-33	7-10
Working expenses per train mile .			Rs	3·58	3-65	3.06	3.9
Net carnings per train mile			R« (1.82	1.00	2.67	3-17
Not earnings per mean mile worked .			Rs.	8,619	0,427	12,716	15,570

Norr.—The figures of Gross Earnings, Working Expenses and Net Earnings for 1938-39 include the Joshat Railway and replacement and renewal expenditure on the Bengal and North-Western and Rohilkund and Kumaon i railways (Company's share) which items were omitted in previous years.

II.—State-owned railway systems.

(The figures include statistics of worked lines of State-owned railways but exclude State-owned portions worked by the Jodhpur and His Exalted Highness the Nizam's State Railways).

Items.			1938-39.	1939-40.	1940-41.	1941-42.
Gross earnings	•	(crores) Rs	99-07	103-02	117-23	184-68
Total Working expenses		(crores) Rs	60-38	67-22	68-13	75-12
Operating ratio		Per cent	67+00	65+25	58-12	55.78
Number of passengers originating	•	(millions) .	477-97	477-13	519-65	563.70
Earnings from carriage of passengers		(crores) Rs	27-89	27-85	30-80	35-21
Average carnings per passenger mile		Pies .	3-11	3-12	3.25	3-44
Freight tons originating		(millions) .	S0-56	S4-15	85+26	88-64
Earnings from carriage of goods	•	(rrores) Rs.	63-95	67-85	70-25	84.01
Average earnings per freight ton mile .	-	Pies .	5.80	5-79	6-65	6-03
Total train miles		(millione) .	170-05	180-44	192-58	187-11
Gross carnings per train mile		Re.	5.51	5-71	6.42	7-20
Working expenses per train nule		Rs	3-69	3-73	3•73 ,	4.02
Not carnings per train mile		Re.	1.82	1.95	2-69	8-18
Net earnings per mean mile worked		Rs.	9,613	10,577	14,524	17,741

INTRODUCTORY NOTE

1. The Railway Board's annual report on Indian Railways is prepared for the financial year. i.e., from 1st April of one year to the 31st, March of the year following.

Volume I is a narrative report dealing with the various aspects of railway working such as general administration, financial results, improvements in, and additions to, rolling stock, commercial and operating methods, recruiting, training and welfare of staff and facilities provided for the convenience of the travelling public.

Volume II contains financial and statistical summaries and statements covering the main heads of capital and revenue accounts and the complete range of railway working.

- 2. For the information of those who are not conversant with the value of Indian currency and the units thereof, the following details are given:—
 - (a) One lakh equals one hundred thousand.
 - (b) One crore equals one hundred lakhs.
 - (c) One anna equals $-\frac{1}{10}$ th of a rupec.
 - (d) One pie equals $\frac{1}{12}$ th of an anna.

The approximate value in English coinage of a rupee at the present rate of exchange is one shilling and six pence.

- 3. For statistical purposes, Indian railway systems are classified as follows:—
 - Class I—Railways with gross earnings of not less than Rs. 50 lakhs a year.
 - Class II—Railways with gross earnings of less than Rs. 50 lakhs a year, but exceeding Rs. 10 lakhs.
 - Class III—Railways with gross earnings of not more than Rs. 10 lakhs a year.

A detailed list of the railways in each class will be found in Statement 5 (pages 43 to 47) of volume II of this Report.

- 4. The Bikaner State Railway ranks as a class I Railway from 1-4-1941
- 5. The Bombay, Baroda and Central India and Assam Bengal Railways have come under State-management and the latter has been amalgamated with the Eastern Bengal Railway forming the Bengal and Assam Railway from 1-1-1942.



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CHAPTER I

GENERAL REVIEW

1. Monsoon conditions and agricultural results.—Rainfall in 1941 was defective and uneven. To begin with, the rains broke earlier than usual i.e., in the third week of May but later there were noticeable and unwelcome stoppages during the second halves of June, July and August. Similarly the north-east monsoon—active in October, November and December caused spells of unusually wet weather over south-east and north-east India while dry weather prevailed in most of north-west India and over the region from the United Provinces to the Decean and the Konkan. Taking the year as a whole, the rainfall was within 20 per cent. of the normal, except in the United Provinces, the North-West Frontier Province, Sind, east Rajputana, Central India, the Central Provinces, the Konkan and Hyderabad where it was defective to a moderate extent.

From the agricultural aspect, the season may, therefore, be considered as fair. The variations in the main crops are as indicated below:—

Decreases-

Sugarcane 32 per cent. less than in 1940-41.

Groundnut 31 per cent. less than in 1940-41.

Castor seed 15 per cent. less than in 1940-41.

Jute 59 per cent. smaller than the preceding season's crop. (This was due to a reduction of 62 per cent. in the acreage under Jute).

Wheat (1940-41 crop) 7 per cent. smaller than the yield of 1939-40.

Linseed (1940-41 outturn) 7 per cent. less than in the preceding season.

Rape and mustard (1940-41 outturn) 2 per cent. less than in the preceding season.

Increases-

Rice—15 per cent. more than the preceding season's crop. (One of the important causes of the increase is the restriction of acreage under jute referred to above. Most of the land released from jute was put under rice cultivation and Bengal showed a 69 per cent. increase in the yield of rice.)

Cotton—1 per cent. above the yield of 1940-41 and 8 per cent. better than the average of the preceding five years.

2. Receipts.—With the continued stimulus provided by war conditions, railway earnings for the year 1941-42 reached a new high water mark. The gross traffic receipts of State-owned railways amounted to Rs.129·18 crores, as compared with Rs. 111·94 crores in the previous year, an increase of Rs. 17·24 crores. After meeting all charges including depreciation and interest on capital at charge, the year's working resulted in a gain of Rs. 28·08 crores. Out of this surplus, Rs.20·17 crores were placed to the credit of the general revenues of the Central Government; Rs. 4·80 crores in full payment of contribution accruing in respect of 1941-42 and Rs. 15·37 crores towards arrear contributions relating to previous years. The balance of Rs. 7·91 crores was credited to the Depreciation reserve fund in part payment of the loan previously taken.

On a comparison of the results of all Indian railways with 1940-41, the volume of traffic handled and earnings therefrom, bothlunder passenger and goods, showed substantial improvements, as indicated below.

Items		 •	10	40-41.	1941-42.	Percentage difference.
Number of passengers carried (millions) Passenger miles (millions) Eathings from passengers (crores) Average rate charged per passenger per mile Average miles a passenger was carried Freight tons carried (millions) Not ton miles (millions) Earnings from goods carried (crores) Average rate charged per ton per mile Average miles a ton of goods was carried	 	 •	Rs. Pics Milos Rs. Pics Miles	673-7 19,929 34-14 3-29 34-6 92-8 25,283 81-48 6-10 272-6	623-1 22,019 89-69 3-48 85-3 97-0 23,046 89-63 6-14 289-1	+8·23 ±10·49 ±16·26 +5·17 +2·02 +4·53 +10·90 -0·81 +6·05

3. Railways and the Legislature.—Out of a total number of 1,063 questions asked in both the Houses during the year 1941-42, 317 or 29.8 per cent. were answered by the Railway Department.

In addition to these questions, the Railways (Local Authorities Taxation) Bill was passed and two resolutions were discussed. These are referred to in the following paragraphs.

- 3.1. Bill regarding Railways (Local Authorities Taxation).—The bill to regulate the extent to which railway property shall be liable to taxation imposed by an authority within a province was moved in both the Houses of the Legislature and passed.
- 3.2. Purchase of the Bengal and North-Western and Rohilkund and Kumaon Railways.—A resolution was adopted recommending to the Government to give notice by the 31st December 1941 to the Bengal and North-Western and Rohilkund and Kumaon Railway Companes of the termination of their contracts and to place both these railways and the Tirhut State Railway under State management.
- 3.3. Moratorium on the payment of arrears from the Railway revenues.—A resolution was moved by the Hon'ble the Finance Member, which had, as its object, the facilitating of the paym nt by railways, to general revenues of certain mones on which under the terms of the separation convention the depreciation fund would have had the first claim. The motion was adopted.
- 4. Railway Budget.—The Railway Budget for 1942-43, after the usual scrutiny by the Standing Finance Committee for Railways, was presented to both the Houses of Legislature on the 18th February 1942. The general discussion thereon took place in the Legislative Assembly on the 23rd February, and in the Council of State on the 24th. There was voting on demands for grants on the 25th and 26th February.

The general discussion covered a variety of subjects, the more important ones being the convention for the separation of railway from general finances, depreciation fund, the railway surplus and how it should be used, co-ordination of rail and road transport and development of alternative forms of transport, dismantlement of lines, taking over of Company-managed Railways by the State, crimes and offences on railways, corruption, hours of employment of staff, procedure for d aling with individual representations of staff, dearness allowance to staff, promotion of Muslims to the Lower Gazetted Service, railways' contribution to the war effort and the manufacture of locomotives in India.

Twelve motions for reduction in demands for grants were moved. But only eleven could be debated of which eight were negatived and three withdrawn. time of the House was taken up mostly by discussion of he s x motions relating respectively to excessive rates of fares and freights, "priority" and public supply of wagons, transport needs of the country and railway administration, grievances of the employees of Indian railways, revision of the convention of 1924 separating the railway from general finances and overcrowding in trains, particularly in intermediate and third class carriages. The first four were negatived and the other two Other motions which were negatived were in respect of punishwere withdrawn. ments and appeals and good conduct marks, functions of the new central transport organization and the need for co-ordinating all forms of transport, railway accidents and growth of ecclesiastical expenditure from railway revenues. The third motion withdrawn raised the question of the non-issue of cheap return tickets to the Haj pilgrims and their grievances generally. The motion which could not be debated and was not put to the House related to certain debits to revenue to which the mover wanted to object.

5. Standing Finance Committee for Railways.—The Committee met nine times during the year. They scrutinised the proposals for the Capital and Rev nue expenditure to be incurred during 1942-43 and examined the demands for grants for that year prior to their being placed before the Legislative Assembly They also examined and approved a proposal for the creation of an additional Superior post on the Great Indian P. n nsula Ralway. The proposals for the purchase of Mirpurkhas Khadro, Bengal and North-Western and Rehlkund and Kumaon Rulways and the raising of the limit of pay up to which staff are to be entitled to dearness allowance were also considered and approved by the Committee. The Committee also approved of the advance allotment for general pur-

poses stores sanctioned in one case by the Railway Board in excess of the limit generally agreed to by the Committee.

- 6. Acquisition of Company Railways by State.
- 6.1. Termination of the Bombay, Baroda and Central India and Assam Bengal Railway Companies' contracts.—According to the Government's decision mentioned in the last year's report, these contracts were terminated and the management of the railways transferred to the State with effect from the 1st January 1942. On that date, the Assam Bengal Railway was amalgamated with the Eastern Bengal Railway, the combined system being known as the Bengal and Assam Railway. Practically the whole staff was taken over by the State.
- 6.2. Purchase of the Tapti Valley Railway.—This railway, a broad gauge line. 156 miles in length, was owned by the Tapti Valley Railway Company. Government had the option to purchase the line and terminate the contract with the company on the 31st March 1942. The purchase which was financially justified, was effected on that date at a cost of Rs. 1,65,29,000.
- 6.3. Purchase of the Mirpurkhas Khadro Railway.—The Mirpurkhas Khadro Railway, a metre gauge line of 49½ miles in length, is the property of the Sind Light Railways Ltd. It is worked by the Jodhpur Railway on behalf of Government for 60 per cent. of gross earnings, subject to a minimum guaranteed share of net earnings. Government has the option to terminate the contract and purchase the line on 31st December 1942 by giving the company 12 months' previous notice. As the purchase was financially justified. Government have exercised the option and given the required notice to the Company. On purchase the line will be worked by the Jodhpur Railway as part of, and on the same terms and conditions as, the Jodhpur-Hyderabad Railway (British section).
- 6.4. Purchase of the Bengal and North-Western and Rohilkund and Kumaon Railways.—The Bengal and North-Western Railway, a metre gauge line of 1.259 miles, is owned by the Bengal and North Western Railway Company Ltd. which also manages the Tirhut Railway, a metre gauge line of 829 miles, and the Mashrak Thawe branch of 39 miles, which are Government property. The Rohilkund and Kumaon Railway, a metre gauge line of 259 miles, is owned by the Rohilkund and Kumaon Railway Company Ltd., which also manages the Lucknow-Barcilly Railway which is a metre gauge line of 311 miles and is Government property. Under the terms of the contracts with these Companies, Government has the option, on giving 12 months' previous notice, to determine the contracts and purchase the railways and also to take over the management of Government owned railways on the 31st December 1942. As the purchase etc., was considered financially justified the Secretary of State on the recommendation of the Government of India has given the required notice to the Companies that the lines will be taken over by Government with effect from 1st January 1943.
 - 7. Central Advisory Council for Railways.—Three meetings of the Central Advisory Council for Railways were held during the year. The following subjects were discussed:—
 - (i) Nomination of Members of the Central Advisory Council for Railways to the Local Railway Advisory Committees.
 - (ii) Dismantlement of branch lines for War purposes.
 - (iii) Ticketless travel—Administrative measures.
 - (iv) Review of the working of the rules and orders relating to the representation of minority communities in the Services of State-managed railways by Mr. Frank D'Souza, C. I. E.
 - (v) Closing of Morappur Hosur and Tirupattur Krishnagiri Branches of the South Indian Railway.
 - (vi) Termination or renewal of contracts of the Bengal and North-Western and Rohilkund and Kumaon Railways.
 - (vii) Supply of rolling stock from Indian Railways for defence purposes overseas.
 - 8. Local Rallway Advisory Committees.—Inspite of altered conditions and the heavy burden thrown on Railway Administrations, their discussions with Local Advisory Committees have continued. These Committees have been found to

constitute a valuable link with the public. Seventy-seven meetings were held during the year as compared with seventy-nine during the previous year.

- 9. Railway Rates Advisory Committee.—Sir Madhavan Nair, having resigned on the 13th December 1941, Khwaja Sir Mohamed Noor, a retired Judge of the Patna High Court, was appointed as President of the Committee on the 5th January 1942.
- 10. Railways and the war.—The strain on railways on account of the war increased greatly during the year. Military traffic reached unprecedented levels. supplies similarly increased and industries throughout the country expanded steadily. The slack period, which was a normal feature of railway working during the summer months, disappeared completely in the summer of 1941 and railways were therefore not in a position to make up arrears of traffic which had accumulated during the previous busy season. Alternative means of transport contracted seriously and while all essential traffic moved, railways were not able to meet in full all the demands placed on them. It was necessary during the year to control the distribution of coal by the appointment of a Coal Distribution Officer and towards the end of the year a priority system for the control of all transport by rail was introduced. Difficulties in obtaining supplies of materials increased and railways were strictly rationed in their demands for commodities such as steel. During the early part of the year, the efforts of railways were largely concentrated on assisting the transport needs of the forces guarding the western approaches to India in Iraq and Iran. Towards the end of the year the approach of the Japanese to the eastern frontier of India caused very considerable changes in the normal flow of traffic in the country as a whole and very heavy traffic to the north-east frontier. These changes further reduced railways' capacity to meet demands in full. While the resources of railways were primarily employed in meeting demands for transportation, they were still able to render assistance to the War effort to an even greater extent than in the previous year. Work on munitions production in railway workshops steadily increased and at the end of the year over 16,000 railway employees were engaged solely on this work. About 230 officers had been released for service in the army or with the Supply Department and a number of subordinates had also been released to be given emergency commissions in Railway Transportation Units. Railways also, at the special request of the Defence Department, undertook the recruiting and training of a large number of men for Railway Military Units for service overseas and had to find from their own resources the officers and staff to do the recruiting and training. Track and rolling stock were supplied to the Defence Department both for overseas and for use in India. With the approach of the War to India's frontiers, a large Air Raid Precautions organisation was built up on railways and this was controlled by a special organisation in the Railway Board.
- 11. Air Raid Precautions on Railways.—An Air Raid Precautions Organisation has been formed on railways for the purpose of keeping trains running and of preventing and dealing with damage and casualties within railway premises. Railway Administrations were authorised to constitute Railway Air Raid Precautions Services for any railway area under their control and for such other areas, not being railway areas, as may be agreed upon between the Provincial Government and the Railway Administration.

The Air Raid Precautions Organisation on Railways is similar to that constituted in the adjacent non-railway areas, and arrangements have been made for close co-operation, and for mutual assistance between the two organisations, should the necessity arise.

In addition to the Air Raid Precautions measures which are taken by Railways in towns which have been classified by the Central Government, Railways have also taken measures in other railway installations and areas which are important for railway operation. Air Raid Precautions measures have been taken in all those railway workshops which are employed on war work.

The Railway A. R. P. Services are recruited mainly from railway servants who perform A. R. P. work in addition to their railway duties, but certain additional staff for full-time A. R. P. duties have been appointed as found necessary.

In addition to the provision of structural precautions for the protection of personnel and valuable plant, etc., the A. R. P. measures consist of the organisation and training of the following services:—

(a) The Wardens Service.

- (b) The Casualty Service.
- (c) The Rescue Services.
- (d) The Fire-Watching and Stirrup Pump Party Service.
- (e) The Fire-Fighting Service.
- (f) The Communications Service.
- (g) The Anti-Gas and Decontamination Service.
- (h) The Bomb Reconnaissance and Confirmation Service.

The Railway Board authorised the payment to part-time members of the Rauway A. R. P. Services of an allowance equivalent to about 10 per cent of their pay to cover out-of-pocket expenses.

A small number of railway personnel were trained in the various branches of A. R. P. work at the schools opened by the Civil Defence Department of the Government of India and by Provincial Governments. The personnel so trained imparted knowledge to the personnel of the Railway A. R. P. Services in schools run by the Railways, and helped to organise Railway A. R. P. Services.

Most of the A. R. P. equipment required by Railways is being obtained through the Central Government.

CHAPTER II

FINANCIAL RESULTS

12. Trade Review.—The values of exports and imports from and into the country are an important index of the movement of commodities for which transport is to be provided. The total value of exports including 're-exports from British India during the year 1941-42 recorded a further increase and amounted to Rs. 252.9 crores against Rs. 198.7 crores in the preceding year, an increase of Rs. 54.2 crores or 27.3 per cent. There were noticeable increases under exports of cotton manufactures including twist and yarn, tea, raw jute and jute cloth, food grains, lac (chiefly shellac) and hides and skins, while decreases were registered under raw cotton, jute bags and tobacco.

The value of imports of foreign merchandise into British India also rose to Rs. 173.3 crores from Rs. 157.0 crores in the preceding year, i.e., an increase of Rs. 16.3 crores or 10.4 per cent. The increases were mainly under raw cotton, motor omnibuses, machinery and millwork, fuel oil and sugar. On the other hand, decreases were recorded under textile group (chiefly cotton piecegoods and artificial silk), kerosene oil and paper and pasteboard. The imports of metals and ores, coal-tar dyes and rice decreased in quantity but increased in value.

A.—Financial results of State Railways (including worked lines).

13. Financial results of working.—The gross receipts of railways were Rs. 135·17 crores in 1941-42 against Rs. 117·58 crores in 1940-41, an increase of The increase was both under goods and coaching.

The ordinary working expenses amounted to Rs. $63 \cdot 54$ crores against Rs. $55 \cdot 62$ crores in the previous year, or Rs. 7.92 crores more. The amount set apart from revenue for depreciation was Rs. 12.68 crores against Rs. 12.64 crores in 1940-41 The operating ratio, that is, the ratio of working expenses or Rs. 4 lakhs more. to gross traffic receipts was 47 per cent. (excluding depreciation) against 47.3 per cent. in 1940-41. The ratio (including depreciation) was 56.4 per cent. against 58 per cent. in the previous year.

Miscellaneous transactions during 1941-42 resulted in a net receipt of Rs. 90 lakhs against Rs. 85 lakhs in 1940-41. Payments to worked lines as their share of earnings amounted to Rs. 3.33 crores against Rs. 3.03 crores in the previous year, or Rs. 30 lakhs more.

The net revenue was Rs. 56.52 crores against Rs. 47.14 crores in 1940-41 or Rs. 9.38 crores more.

Due to fall in the rate of interest from 4.41 per cent. to 4.34 per cent., the interest charges in 1941-42 fell to Rs. 28.44 crores from Rs. 28.68 crores in 1940-41.

Against the surplus of Rs. 18.46 crores in 1940-41; the surplus in 1941-42 was Rs. 28.08 crores Under the special arrangements introduced last year, Rs. 7.91 crores would have accrued to the railway reserve and the general revenues would have received Rs. 20·17 crores (Rs. 4·80 crores on account of 1 per cent. contribution for the year, Rs. 6·03 crores in payment of arrears of contribution and Rs. 9·34 crores as advance payment). The arrangements, referred to, were, however, reconsidered during 1941-42 and it was decided that the whole of the payment to the general revenues, over and above the 1 per cent. contribution, should go to discharge the liability for the arrears of contribution, and the railway share of the surplus should go towards discharge of the loans from the depreciation fund. Accordingly, Rs. 7.91 crores were credited to the depreciation fund, Rs. 4.80 crores were paid as current contribution to the general revenues and Rs. 15.37 The sum of Rs. 7.53 crores paid to the general crores as arrear contribution. revenues in 1940-41, over and above the 1 per cent. contribution for that year, was also taken in payment of the arrears.

13.1. The appropriation to the depreciation reserve fund was Rs. $12 \cdot 68$ crores and the amount withdrawn for renewals was Rs. 5.35 crores resulting in a net accretion of Rs. 7.33 crores to the fund. Adding Rs. 7.91 crores paid in partial discharge of the loans from the fund, the balance at credit of the fund at the end of the year was Rs. 51.85 crores, the nominal balance being about Rs. 74.23 crores.

- 13.2. The total works expenditure during the year under review amounted to Rs. 1·31 erores, of which minus Rs. 4·04 erores were under capital and Rs. 5·35 crores from the depreciation reserve fund. Of the capital expenditure minus Rs. 4·02 crores related to open lines and minus Rs. 2 lakhs to new constructions. These figures do not take account of Rs. 4·87 crores on account of repayment to the Assam Bengal Railway and Bombay, Baroda and Central India Railway Companies of their share of capital on the termination of the contracts.
- 13.3. The unliquidated liabilities of railways which, at the end of last year, stood at Rs. 30.29 erores on account of loans from the depreciation fund and Rs. 28.18 erores on account of unpaid contributions to general revenues, were reduced, after making adjustment of Rs. 18 lakhs in rectification of certain previous mistakes, to Rs. 22.38 erores and Rs. 12.63 crores respectively at the end of the year under review.
- 14. Net traffic receipts, interest charges and surplus.—The statement below compares the surplus and the percentages of net traffic receipts and interest charges to the capital at charge for the five years ending with 1941-42.

(In lakhs of rupees).

Year.					Net traflic reccipts.	Percentage of net traffic receipts to capital at charge.	Interest charges.	Percentage of interest charges to capital at charge.	Surplus.
1937-38			,	•	32,07	4.3	29,26	3.9	2,76
1938-39	,				30,44	1.0	29,30	3.9	1,37
1939-40					32,80	1.3	29,11	3.8	4,33
1940-41			•	•	46,29	6-1	28,68	3.8	18,46
1941-42	•		•	•	55,62	7-4	28,41	3.8	28,08

15. Traffic Receipts.—During the year under review, there was an increase over last year under all the heads of traffic receipts as shown below:—

										(Crores of	rupees).
v							•			1940-41.	,1941-42.
Passenger earnings			٠		•	•	•	•	•	31-12	36.36
Other coaching ear	ning	ţs.	•		•	٠.	•	•	٠,	7.36	10.78
Goods earnings .	•	•	٠,	•	• ,	•	•	•	•	76.77	84.76
Sundry earnings	•		•	•	•	٠		•	•	2.57	3.44
Suspense .	•	•	•	•	•	•	• ′	•	•	21	17
,	_						T	otal		117-58	135-17
Less:-											•
Earnings of w	orke	ed lin	. es	•	•	•	•	•	•	5•64	5.99
,	-			•				Net		111-91	129-18

The total increase including Rs. 35 lakhs in the earnings of worked lines was Rs. 17.59 crores, Rs. 5.24 crores under passenger traffic, Rs. 3.42 crores under other coaching traffic, Rs. 7.99 crores under goods traffic and Rs. 94 lakhs under miscellaneous. The net increase in the traffic receipts of State-owned lines was Rs. 17.24 crores.

The increase under passenger earnings was under all classes. The figures for Class I Railways are given below:—

,								·	(In lakha	of rupees).
•									*1940-41.	1941-42.
First class .				•				•	86	1,21
Second class	٠	•						•	1,55	2,16 ·
Intermediate ch	145	. •			•		•		1.43	1,90
Third class .	•	٠.			٠.		•	•	28,85	32,91
			,			Т	otal	•	32 69	38,18

^{*} Inclusive of Bikaner State Railway for purposes of comparison

The details of traffic earnings of individual railways are given in statements No. 3 and 6, pages 40—41 and 48—50, of Volume II of this report.

- 16. Working expenses.—The working expenses of each railway are detailed in statements No. 3 and 7, pages 40-41 and 51—61, of Volume II of this report.
- 17. Losses and gains.—The statement below compares the net gain or loss on each railway with the previous year. For the purpose of calculating the gain or loss, the figures shown in the Companies' accounts have been recast to accord with the Government accounting procedure, i.e., the working expenses include the appropriation to the depreciation fund and not the actual expenditure on renewals and replacements which is taken into account in the Companies' own accounts.

(In lakhs of rupees).

Year	B &.A. (E.B)	E.I.	g.I.P.	N. W. (Com- mercial)	N. W. (Strate- gic)	B. &. A. (A.B.)	B. N.	B. B. &. C. I.	M.&.S.M.	S. I.	Luck- now— Barrelly	Tır- hut
1940-41 1941-42	—24 —8	5,10 5,59		2,81 4, 85	—1,52 —1,83		1,49 2,42	3,93 4,47	1,11 2,07	48 1,28	18 17	58 499

18. Effect of the War on earnings and working expenses.—The movement of troops and commodities required for military purposes continued to be on a very large scale. There was also considerable internal movement of indigenous products due to shortage of imported goods and increased output by Indian industries. The shortage of shipping diverted heavy traffic from sea to rail. The higher cost of motor transport and petrol rationing similarly diverted considerable traffic from road to rail. The evacuation of coastal towns and the influx of refugees from Malaya States and Burma added to passenger traffic. But the loss of European and Far Eastern markets and the shortage of shipping seriously affected the overseas trade and consequently had an opposite effect on railway earnings. The net result was, however, a very substantial increase in earnings, which were about Rs. 135 crores against Rs. 1171 crores in 1940-41.

The working expenses also increased from Rs. 55½ crores in 1940-41 to Rs. 63½ crores in the year under review. The increase was partly due to expenses on additional staff and stores for handling additional traffic and partly to enhancement in the rate of dearness allowance, measures for protection from air raids and the rise in the prices of materials.

19. Analysis of Financial results of working.—An analysis of the financial results of the working of the railways owned by the State is given in the following statement for 1940-41 and 1941-42:—

(Figures to theoreteds of supers)

,	1	Deduct amount of	Net	,	Working			Percentage	CHARGE A	RECEIPTS.	4]
Relivay*.	Capital at charge.	capital contri- buted by Companies and Indian States.	Government Capital at charge.	Recespts.	Expenses including Deprecia	Payments to worked lines,	Net Receipts.	of Net Receipts on capital	Paymenta fon account of -hare of burglus Profits.	Intere t	Gaina	Lore,
I. & A. (A. B.)—				State L	ines-Manage	d by State				*		
1040-41 1941-42	24,81,64 24,50,16	2,21,22	22,63,42 24,50,16	2,26,27 2,40,57	1,71,53 1,89,65	8,15 7,50	40,59 43,42	19	1 <u>.12</u> 1,43	92,67 98,50	•	45,6 84,5
3, B, & C, I, 1040 41 1941-42	74,28,39 74,03,09	5,49,00 85,00	. 68,79,39 78,18,09	14,80,17 16,31,69	7,65,33 8,80,30	.33,54 37,98	6,81,30 7,63,41	9·2 10 3	(a) 21,67 46,02	2,66,37 2,70,60	3,94,26 4,46,79	
B, & A. (E. B)									,	1		
1040-41 1941-42 : :	53,89,62 58,57,41		53,59,62 53,57,41	6,88,89 7,52,16	5,11,12 5,54,98	6,01 8,88	1,69,76 1,88,80	J·I 3 5	a degree of	1,95,93		24,4 8,1
1940 41	1,50,52,97 1,48,51,91	::	1,50,52,97 1,48,51,91	21,35,52 27,13,39	13,43,22 15,79,80		10,92,30 11,33,59	7-3 7-8		5,82 CS \ 5,74,69	5,09,62 5,58,90	::
1940-41 1941-42	1,12,90,93 1,12,63,30	::	1,12,99,93 1,12,63,80	17,26,65 22,02,00	9,34,08 11,18,90	- 39,68 43,91	7,52,69 10,39,28	, U 7 9·2	1	1,00,30, 10,40,8	3,52,53 6,45,27	••
N. W.— 1010.11 1941-42	1,47,91,78	:	1,47,91,78 1,48,69,44	19,60,73 22,92,70	12,40,81 18,56,71	28,80 30,34		17 62		5,61,55 5,53,81	1,29,51 3,51,81	
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		nes Managed				j	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		••
1910 41	. 78,52,55 78,98,48	0,82,21 6,82,29	71,70,26 72,14,19	12,14,03	7,41,69 7,81,58	1,13	4,68,81 5,67,51	6·0 7 2	6,69 13,34	3,13,26 8,12,14	1,48,86 2,42,63	••
1040 41	53,50,62 53,09,54	6,59,33 6,59,53	46,91,29 48,50,21	5,37,86 9,83,86	4,82,19 5,30,65	11,17	3,41,50 4,40,18	G•4 B 8	11,92 14,07	2,21,18 2,18,78	1,11,4° 2,07,34	;;
5. 1.— 1940 41 1041-42	46,41,27 45,82,07	5,64,76 5,64,76	40,76,51 40,17,31	6,13,98 7,26,56	3,81,74 4,08,21	9,10 , 13,68	2,19,75 8,04,67	4·7 6·7	6,26 13,17	1,60,50 1,63,90	47,03 1,27,60	••
Other Railways-		ı								-		i
1940-41	18,10,10 16,89,20	2,12,51 2,45,84	15,97,59 14,43,86	5,73,12 6,24,46	2,48,17 2,71,17	1,68,91 1,82,09	1,56,04 1,71,20	8 G 10·1	3,08 4,85	62,93	63,31 1,03,37	••
Reserve Fund Balances— 1940 41 1841-42	.:"	::	• • • • • • • • • • • • • • • • • • • •	1,59,56 2,14,19	::	~ :·	1,59,56 2,14,19		∷		1,59,56 2,14,19	
let Misc. Receipts and Charges not attributable to any one railway— 1940-41	.::	::		::	::			••	••		••	(b) 18,
Cotal Central			••	••	"	••	••	••	••	••	••	75 ,
1940-41	7,60,92,87 7,54,72,60	28,69,11 22,87,22	7,32,03,76 7,82,85,88	1,19,17,28 1,87,31,76	68,25,88 76,21,93	3,08,94 8,87,92	47,82,56 57,71,91	6·3 7·6	49,64 92,83	28,67,78 28,44,34	16,46,43 28,07,94	<i>::</i>
1940-41		::	::	(c) · · 1	::	::	1	::	::	∷	1	••
F. W. (Comm.)— 1940-41 1941-42	1,14,14,64 1 12,95,62	::	1,14,14,64 1,12,95,62	17,67,45 20,88,95	10,43.5 11,44. 5	28,56 50,34	15 c),7 £2,	u-3 81		4,34,15 4,27,54	2,51,16 4,85,02	
N. W.— You Comm (Strategic	1					,				-,,-		••
1940 41 1941 42	33,77,14	::	33,77,14 33,75,62	1,73,25	1,97,53 2,12,66	••	-,71	-t -t.:		1,27,47 1,26,27	::	1,51, 1,23,

⁽A includes payments to Jaipur Durbar

^{1,11,2-41 1961-1} 6,67 12.13

⁽a) Includes recoveries from Travancore Darput

^{...}

⁽c) Reprodute I gares on account of Substantial Companies.

B.—General results of working of all Indian Railways.

- 20. Analysis of earnings.—The total earnings of all railways, including those in which the Government of India have no financial interest, amount to Rs. 144.69 crores, of which Rs. 89.63 crores or 62.0 per cent. were from goods traffic, Rs. 39.69 crores or 27.4 per cent. from passenger traffic and Rs. 15.37 crores or 10.6 per cent. from parcels, luggage and other miscellaneous sources of revenue.
- 20.1. Passenger earnings—In comparison with 1940-41, passenger earnings on all Indian Railways increased by Rs. 5.55 crores to Rs. 39.69 crores, an increase of 16.3 per cent.; the number of passengers carried increased by about 47 millions—an increase of about 8 per cent., and passenger miles by 2,090 millions, an increase of about 11 per cent. Some of the striking variations in passenger traffic on individual railways are indicated below:—

(Figures in lakhs).

Radway system.	1		r	Vari	ations as compa Passengers carried.	ared with 1940-41. Earnings.
					No.	· Rs.
North Western					. +13,6	+1,51
Great Indian Peninsula	•				+10,4	+90
East Indian		•		•	., + 1,7	+74

Detailed figures of the number of passengers carried, passenger miles and earnings therefrom are given in Summary X, Statements No. 12 and 36, pages 12—13, 92—99 and 227—233 respectively of volume II of this report.

20.2. Goods earnings—The earnings from goods traffic on all railways increased by Rs. 815 lakhs or 10 per cent. as compared with 1940-41. The tonnage of goods carried increased by about 4 millions tons or about 5 per cent. and each ton was carried an average of approximately 289 miles instead of only 273 miles last year with the result that the net ton miles registered an increase of 2,758 millions or about 11 per cent. over last year.

There were appreciable increases under military traffic, fuel (mainly coal), sugar, oilseeds, gram and pulse, other grains, wood, marble and stone, cement, metallic ore and rice while decreases were registered under iron and steel wrought, cotton manufactured molasses, kerosine oil and fruits and vegetables.

The heaviest increase in goods traffic was registered on the Great Indian Peninsula Railway where the tonnage carried increased by 2.7 millions—an increase of over 22 per cent.

Detailed goods statistics will be found in Summary X, Statements No. 13, 29 and 36, pages 12—13, 100—111, 161—176 and 227—233 respectively of volume II of this report.

CHAPTER III

NEW CONSTRUCTION AND ENGINEERING WORKS

21. Capital Expenditure.—At the end of March 1942, the total capital at charge on all railways, including those under construction, amounted to Rs. 848.06 crores, of which Rs. 754.73 crores was capital at charge on State-owned railways inclusive of premia paid in the purchase of Companies lines. The remainder, Rs. 93.33* crores, represented capital raised by Indian States, Companies and District Boards.

The capital at charge of State-owned railways is composed as follows: -

		_				£
Liability and debt incurre I in purchase	of r	iilway	78	•	•	150,105,630
Less liability and debt cancelled by the	e oper	ation	of An	nuit	ies	
and Sinking Funds	_			•	•	-29,231,911
Net amount outstanding		•				120,821,689†
·]	Rs. (omitting 000)
Direct expenditure by Government						5,93,63,17
The above sterling figure converted int	o rup	ees	•		•	1,61,09,43†
	•	Frand	Total			7,51 72,60

By far the greater portion of this amount, namely Rs. 7,32,35,38,000 is Government capital and only 1-33rd or Rs. 22,37,22,000 is owned by Companies, etc. These figures include Rs. 33,73.82,000 on account of capital expenditure to the end of March 1942, on strategic lines.

The total capital outlay on all railways during 1941-42 was minus Rs. 3.57 crores, of which minus Rs. 4.04 crores related to State-owned railways. The minus figure is mainly due to adjustments on account of dismantled lines and sale of rollingstock to the Defence Department.

The distribution of the capital outlay in 1941-42 over the different Stateowned lines is shown in the summary below:—

(Figures in lakhs.) OPEN LINES. Railways. New lines. GRAND TOTAL. Rolling-stock. Works, etc. TOTAL. Rs. Re. Re. Bengal Nagpur 42 44 44 Bombay, Baroda and Central India -17 -16 -33 --33 3 Bengal and Assam (Eastern Bengal) -35 -32 -32 East Indian -1,30 -34 -1,64 1.64 Great Indian Poninsula 60 -37 13 13 11 Madras and Southern Mahratta -52 41 41 -1,10 North Western -1,13 1.15 South Indian . -59 -59 Other Indian railways -17 -17 --17 -1,69 -2,34 4,02 TOTAL -1,04

Norr.—A part of the capital expenditure on Provincial railways (14,61) shown separately in previous years has been included under direct expenditure by Government (13,22) and the balance (1,30) representing expenditure on a siding has been omitted.

^{*} Includes Rs. 8,87,000 representing outlay on the Alasvar-Dandeli Railway.

^{† \$2,575,000} and \$2,000,000 representing share capital of the Great Indian Peninsula and Bombay, Barrda and Central India Railways respectively paid off during 1925 26 and 1941-42 respectively have been converted at the appropriate average rate of exchange for those years and the balance of \$116,246,689 at the rate of 1s. 6s. to the ruper.

- 22. Mileage of Lines opened or sanctioned in 1941-42.—No mileage was opened during the year although sanction was accorded to the construction of a new line of 32·18 miles (3' 33" gauge) from Morvi to Halvad in the Morvi State.
- 23. Surveys and Lines under construction during 1941-42.—No surveys and no new constructions were undertaken during the year. Moreover the construction of the two sections Mudkhed'-Adilabad (to be constructed by the H. E. H. the Nizam's State Railway) and Fatehpur-Bissau (to be constructed by the Jaipur-State Railway) where work had been previously reported (in 1939-40 and 1940-41) as suspended due to war conditions, remained suspended.
- 24. Lines closed during 1941-42.—Mention was made in the last year's Report of the dismantlement of branch lines of rulways which had been necessary to provide track for military operations. In the year under review, there have been further heavy demands. After supplying as much as possible by rolling of new rails and by utilising railways' stock of second-hand material, the balance had to be met by dismantling branches as a last resort. The branches dismantled were selected in consultation with the Provincial Government or the Indian State concerned after carefully considering the relative position of all branches in India with regard to their remunerativeness and other means of transport available in the area. The following lines were closed during 1941-42, besides the Raipur Forest Tramway belonging to the Government of the Central Provinces:—
 - (i) Auhadpur-Balamau, East Indian Railway.
 - (ii) Utraitia, Sultanpur-Zafarabad, East Indian Railway.
 - (iii) Bhagalpur-Mandar Hill, East Indian Railway.
 - (iv) Tinpahar-Rajmehal, East Indian Railway.
 - (v) Unao-Madhoganj, East Indian Railway.
 - (vi) Fort Abbas-Kutal-Imaia, North Western Railway, (belonging to the Bahawalpur State).
 - (vii) Rohtak-Gohana, North Western Railway.
 - (vin) Joginder Nagar-Nagrota (Kangra Valley Railway), North Western Railway.

Amount

- (ix) Bobbili-Salur, Bengal Nagpur Railway.
- (x) Vasad-Kathana, Bombay, Baroda and Central India Railway.
- (x) Madura-Bodinayakkanur, South Indian Railway.

25. Open Line Improvements.

	Amount. Rs.
. Bengal and Assam Railway.	1137
Replacing Main signals with Home signals and inter-locking 11 way-side stations, Gauhati Branch	1,59,000
Bengal and North-Western Railway.	
Retired alignment of main line between Thana Bihpur and Narayanpur	1,65,138 -
East Indian Railway.	
42·14 miles of secondary relaying on the Barka Kana Loop; and	6,86,462
Great Indian Peninsula Railway.	•
Improvements to the Up and Down yards at Itars:	1,80,500
Remodelling and inter-locking of Dhond Yard	4,34,257
Electrification into Wadala Yard	1,14,669
Madras and Southern Mahratta Railway.	
Re-alignment of main line between mile 12/18 and 13/5 between Londa and Tinai Ghat and provision of 4-4 ft. Hume reinforced cement concrete pipe line in lieu of Bridge No. 60 collapsed	1,12,395
Improvements to watering arrangements at certain stations	-,,000
on the North East line	3,02,000

IAP. III. NEW CONST	RUCTION AND ENGINEERING WORK	
1		Amount. Rs.
Rohill	and Kumaon Railway.	
Signalling and Interlocking Bareilly section	at 10 stations on the Lucknow-	97,234
	South Indian Railway. ,	
struction of a new bridg Cochin Railway	nile S. 27/13-14 to S. 27/24 and con- e on the new alignment, Shoranur	1,12,994
26. Important Works Sai		
	Bengal Nagpur Railway.	
Provision of 201 single rement trainees at Kha		1,05,634
	East Indian Railway.	
abad and Lucknow	ry additional facilities on the Allah- Divisions in connection with the nabad in 1942 the Upper Sone Bridge and appro-	3,75.000
- L - and therefo		1,57,011
I and II	ne between Ondal and Khana, Stages	19,64,436
	at Indian Peninsula Railway.	0.41.040
Provision of Staff quarters	at Dhond	3,41,612
Provision of a new building station		58,364
	Military Depots.	
Provision of railway siding military depots		66,93,425
. *	Medical facilities.	
Pilibhit, Byculla and a	ies for staff at Saidpur, Lalmanirhat, at various stations on the Bengal	89,377
27. Bridge Strengthening	ng and Protection Programme.	1
1	Bengal and 'Assam Railway	`
Gangadhar Bridge—Re-i bund throughout ar guide bund .	nforcing the apron of the right guide ad down stream portion of the left	1,08,000
Extension of protection in connection with	bank at Raita from chain 51 to 57 Hardinge Bridge	2,99,000
	East Indian Railway.	
of training bund, brid	Works in connection with extension lge No. 1248	2,92,242
	s and Southern Mahratta Railway.	
D-1-1-m	rengthening of spans of the Godavari	7,00,603
. Repairs to Bridge No. 175	between Mormugao and Portuguese	2,88,909
' haidaan	s, Portuguese frontier to Londa (14)	2,58,000
Rebuilding certain laterit ween Londa and Gun	e bridges (on Belgaum District) bet- ji .	1,50,000
Ro	hilkund and Kumaon Railway.	•
Regirdering Gomti Bridge mile 3/21 ch. 272,945 station	No. 27, 2 spans of 40 ft. girders at between Lucknow City and Daligan	1,20,091
*		

CHAPTER IV

TRANSPORTATION

A.—Operating.

28. Volume of traffic handled.—The progress of the war brought considerable fresh demands on rail transport as a result partly, of increased military activity and partly more intensified production of the industry engaged largely on war work. The year thus witnessed a phenomenal increase in the volume of traffic handled; both passenger and goods. The increase in the passenger miles—a unit for measuring the passenger traffic handled—was 10.8 per cent. and that in the ton miles—a unit for measuring the freight traffic handled—was 11.4 per cent. as compared with the preceding year. The following statement shows the amount of traffic handled and the increases as compared with the preceding year and over the prewar year (1938-39):—

(Figures in thousands.)

		Class I	Railways.		
Particulars.	1938-39.* (Pre-war)	1940-41.*	1941-42	Percentage of increase (+) or decrease (-) as compared with 1938-39.	Percentage of increase (+) or decrease (-) as compared with 1940-41.
Passenger miles Net ton miles†	18,072,018 21,402,533	19,220,995 24,559,320	21,298,028 27,851,483	+17-9	+10·8 +11·4

^{*} Includes Bikaner State Railway for comparison with 1941-42.

29. Train miles.—This increased volume of traffic was dealt with without a corresponding increase in train miles which were kept as low as possible.

The number of train miles run to carry the traffic referred to above is compared in the table below:—

(Figures in thousands.)

Particulars.	1938-39.* 1940-41.* 1941-42.	Percentage variations with	
	(Pro-War).	1938-39.	1940-41.
Passenger (including proportion)	111,503 100,040 107,209	—3∙85	-1·68
of mixed) train miles.† Goods (including proportion of	69,172 74,698 81,111	+17:3	+8.59
mixed) train miles,§			

^{*} Includes Bikaner State Railway for comparison with 1941-42.

With an increase in "passenger miles" of 10.8 per cent., the train miles were actually reduced by 1.68 per cent. as compared with the previous year. But although the number of passenger trains was reduced, the composition of trains was strengthened to offset partly the loss of accommodation.

Similarly with an increase of 11.4 per cent. in "net ton miles" there was only an increase of 8.59 per cent. in goods train miles.

Detailed figures of train miles of class I railways are given in statements No. 17 and 32, pages, 120-121 and 219—222, and those of classes II and III railways in statement No. 37, pages 234—238, of volume II of this report.

[†] Excludes Departmental.

[†] Includes mileage of electric locomotive and electric multiple unit trains but excludes departmental.

⁵ Includes mileage of electric locomotive trains but excludes departmental.

In paragraphs below the results of passenger and goods train services on Class I Railways are reviewed by gauges:—

30. Passenger trains.

(Figures in thousands).

	·			(1)	igures in the	ousands).					
		Class I Railways.									
Particulars ,		Broad gaug	ge.	Metre gauge							
	1940-11. 1941-42.		Percentage of variations with 1940-41.	1940 41.*	1941-42.	Percentage of variations with 1910-41.					
Passenger miles	13,329,347	14,954,643	+12.2	5,658,855	6,099,271	÷7·79					
Coaching vehicle miles (including	1,046,834	1,067,808	+2.00	511,355	499,552	2.31					
proportion of mixed). Passenger train milest (including proprotion of mixed).	72,663	71,590	-1.48	33.821	33,164	-1.95					

^{*} Includes Bikaner State Railway for comparison with 1941-42.

On the broad gauge railways, while passenger miles increased by 12·2 per cent., the coaching vehicle miles increased by only 2·0 per cent. and the passenger train miles decreased by 1·5 per cent. On the metre gauge railways an increase in passenger miles of 7·8 per cent. was achieved with a small reduction in the train miles and vehicle miles. These figures show that with public co-operation railways have been able to make a fuller use of their train services.

30.1. Punctuality of passenger trains.—The following table shows the percentage of passenger trains not losing time to the total number of trains run on all Class I Railways during 1941-42 as compared with 1940-41:—

;									All trains (including electric multiple unit trains).	Mail and important through trains	Mixed trains	suburban trains	Other passenger trains	
		Bi	OAD (Javor	2.									
1940-41		٠.							•	81.2	77.2	79.7	92 4 91 - 5*	80.8
1941-42		•	•					•	•	77.7	65.7	75 \$	86 1 87 1*	71.7
		Mr	tre G	AUGE			•						1	
1949 41								۶.		84.9	78.8	87 9	97.5 92.2†	82-1
1941-42	•		•					,•	•	80.2	66.2	84.9	93 1 89 8t	76.0

^{*} Bombay, Baroda and Central India and Great Indian Peninsula Rulways electric multiple unit trains.

31. Goods trains.

(l'igures in thousands)

					, 0	
			• Cla	ss I Railways	•	
Particulars.		1938 39.* (pre-war)	1940-11.*	1941 -1 2.	Percentage variations with 1938-39.	Percentage variations with 1910-41.
Goods (including proportion of	ſB.G.	18,283,959	21,011,216	23,524,197	+-28-7	+11.8
mixed) ton miles.†	M.G.	3,092,002	3,428,560	3,725,129	+20.5	-8∙6 5
•	(B.G.	2,117,936	2,328,866	2,533,041	-19.6	18.77
Wagon miles (including proportion of mixed).	M G.	663,822	711,516	741,934	411.8	4-4-23
	ſB.G.	48,018	52,762	57,395	+19.5	~8.78
Goods train miles (including pro- portion of mixed)	M.G.	19,400	20,113	21,691	÷11·8	±7·85
4-	l		1			

^{*} Includes Bikaner State Railway for comparison with 1941-42.

[†] Includes electric multiple unit suburban trains

[†] South Indian Railway's electric multiple unit trains.

[†] Ecludes Departmental.

On the broad gauge railways, goods ton miles increased by 11.8 per cent. in comparison with the previous year but the wagon miles 10se by 8.77 percent. and the goods train miles by 8.78 per cent. only. On the metre gauge railways an increase in freight ton miles of 8.65 per cent. in comparison with the previous year was operated with an increase in wagon miles of 4.28 per cent. and in train miles of 7.85 per cent. Since the broad gauge carried nearly 84 per cent. of the total goods traffic, the heavier train loads on that gauge were of material value to the total effort.

- 31.1. Goods train Speeds.—The average speed of goods trains (steam) was somewhat lower than last year, i.e., 10.6 miles per hour for broad gauge and 10.7 miles for metre gauge railways. This was mainly due to delays caused by heavier strain on line capacity on some of the through routes. Other factors like engineering restrictions, efforts to obtain better train loads and difficulty of keeping up the standard of locomotive maintenance also contributed to a limited extent towards this.
- 31.2. Goods train loads.—The smaller rise in train mileage, as compared with the rise in the increased volume of traffic referred to in paragraph 28 was the result of an improvement in the average net or freight load of goods trains. On the broad gauge railways the net or freight load per goods train (steam) increased from 398 tons 1910-41 to 409 tons in 1941-42. The following railways achieved marked improvements in the average net load per train, as indicated below:—

Average net or freight weight, per train.

		Bros	ıd grı	ıge			Bengal Nazpur	Bombay, Baroda & Central India.	Great Indian Peninsula	North Western
1040-41	•	•		•	 •		414	378	369	315
1941-42				V.	•	•	431	387	393	330

	¥	2	Metre gang	e					Jodhpur	South Indian	
1940 41			•		•	1	•		180	170	
1911-42	•	•		•		•		•	203 -	180 -	

- 32. Stock usage.—With a small reduction in the rolling stock equipment, the increased traffic which railways were called upon to carry, was handled by more intensive utilisation of the stock. In the following sub-paragraphs the usage of stock during the year is reviewed.
- 32.1. Engine usage.—This is the asured in terms of engine miles per engine per day. Comparing with the previous year the daily mileage per engine on line i.e., inclusive of the time occupied under repairs etc., increased from 83 to 87 on the broad gauge and 77 to 81 on the metre gauge. The percentage of engines under or awaiting repairs in Mechanical and Transportation Workshops was further reduced on the broad gauge from 17 per cent. in 1940-41 to 16.5 per cent. during the year under review but increased on the metre gauge from 12.5 per cent. to 13.6 per cent.

In addition to the improvement in engine miles per day per engine on line mentioned above, there was also an improvement in the loads hauled by the engines. Thus the net ton miles per locomotive day showed an increase both in relation to the locomotives on line and locomotives in effective use.

•									Net ton miles per goods loco- motive day on line	Net ton miles per goods loco- motive daily in use.
			BROAT	D GYE	or ·			4	,	
1040-41									17,154	26,661
1941-42	•				•	•	•	-	18,380	26,962
			Mern	e gat	ai,					
1940-41	٠,		•					•	7,637	12,157
1941-43		•	•						8,111	12,389

Details of engine usage are given in statement No. 22, pages 136-139 of volume II of this report.

32.2. Wagon usage.—One of the best statistical units to measure the operating efficiency of wagon usage is the 'average number of miles run per wagon day', both loaded and empty wagons being taken into account. These figures for Class I Railways are as follows:—

	Broad	gruge	Metr	6 Erake
	1940 11.	1941-32.	1910-41.	1941-42.
Wagon miles per wagon day	42.9	47.0	33-1	35.9

Another unit showing the extent of wagon utilisation is 'net ton miles per wagon day' which reflects the effect of both, the movement of wagons, and the load that is put into a wagon. The results as shown by this unit were still more satisfactory. Figures for Class I Railways are as follows:—

	Bron	d gauge.	Metr	e gauge
, village come.	1940 41.	1941-42,	1940-41	1941-42.
Net ton miles per wagon day	392	441	163	183

Details of vehicle and wagon miles and their usage are given in statements No. 19 and 24, pages 130—133 and 142—143 of volume II of this report.

32.3. Reduction in wagons loaded with 'smalls'.—One of the methods of achieving better wagon usage was to focus the attention on the number of wagons loaded with smalls. It is known that such wagons carry light loads and are also detained for long periods at loading, unloading and repacking stations. Efforts were, therefore, made to reduce the wagons carrying such traffic. The results achieved are shown in the statement below:—

					No. of was		Reduction	wagons lo	the total
	-	_			1910-11.	1941-42.	in compan- son with 1940-41.	1910 41	1911-42.
Broad gauge . Metre gauge .	•		•	•	1,173,007 648,923	1,040,723 563,238	—11·3% —13·2%		20·6 23·1

33. Measures to get better wagon loads.—With the object of obtaining an improvement in wagon loads, all railways have given careful consideration to the necessity for the revision, or overhaul, of their arrangements for the transport of "smalls," traffic and the results obtained have been dealt with in the previous paragraph. Endeavours were made to reduce transhipment to a minimum and to increase the load per vehicle to a maximum. Careful attention was given to the introduction of schemes for nominated loading, thus ensuring a better usage of the wagon stock available. Furthermore, attention was paid to the making up of road vans to the fullest possible load and despatching them to the furthest possible points as through sealed vans, thus economising in the number of wagons required.

Intensive propaganda was undertaken to drive home to the loading public the necessity for ensuring maximum wagon usage.

Considerable progress was also made in the programming of the movements of certain commodities.

A reference is also invited to sub-paragraph 37.1 of the report, which deals with other action taken by Railways to improve loading of wagons.

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24. Operating—general.—With the entry of Japan into the War in December, 1941, hostilities extended to Malaya and Burma, with the natural result of a considerable increase in the activities of railways. Personnel and supplies passing through the main ports necessitated the running of a considerable number of special trains, thus adding to the already heavy burden. Special trains also had to be run for evacuees returning to their homes and also on account of the heavy exodus from Calcutta. This increase in traffic, allied with considerable military movements, adversely affected goods train services throughout India, and metre gauge railways were further handicapped by the demands placed on them for locomotives and wagons for despatch to overseas theatres of war.

The advent of petrol ration ng in August, 1941, also brought an increase in traffic to the railways.

Measures were taken to relieve the situation as and when opportunity offered, and amongst other matters all railways devoted attention to the following:—

() the formation of through train loads for the longest possible distances in order to avoid marshalling at goods yards en route;

(i) securing of the maximum possible wagon load;

(iii) the adoption of the shortest rail route, wherever feasible, regardless of the financial interests of individual railways;

(v) when adequate notice of the movement of special military trains was received, goods traffic was restricted on routes working to capacity so as to obviate delays to loaded wagons; and

(v) the employment of non-pooled wagons, wherever possible, to relieve the

strain on the wagon pool.

In addition to these measures, the Controller of Coal Distribution kept a careful check on the use of wagons and the distribution of coal to factories and essential users with the object of ensuring supplies being made from the nearest source. Also certain types of non-pooled stock were placed under the control of the Director of Wagon Interchange so as to obviate unnecessary light running and securing the maximum use of these vehicles.

The extent to which the unabated efforts of railways contributed towards improved operating efficiency is indicated in figures quoted in paragraphs 28 to 32

35. Wagon position in the pool.

35.1. Broad gauge wagon pool.—The number of public service wagons (in terms of four-wheelers) in use at the end of the year was 151,300 ie.. 1,485 less than at the end of 1940-41. The total number of wagons loaded during the year was 5,056,584 being a decrease of 29,735 wagons or 0.59 per cent. as compared with the previous year. The highest daily loading was registered in the ten-day period ending 10th April 1941 when an average of 15,462 wagons were loaded daily. The highest average daily loading in the previous year was 16,196 wagons in the period ending 31st January 1941 and the highest daily loading on record is 17,339 during the period ending 29th February 1940.

Demands throughout the year exceeded the available wagon supply.

The number of wagons temporarily out of service on all broad gauge railways varied between 5,633 wagons and 7,716 wagons.

35.2. Metre gauge wagon pool.—The number of public traffic wagons on 31st March 1942 was 44,846 i.e., 5,365 wagons less than at the end of 1940-41. The heaviest loading was recorded during period ending 10th February 1942 when an average daily loading of 7,253 wagons was attained. The highest daily loading recorded previously was 8,882 wagons in the period ending 29th February 1940. Owing to the release of a substantial number of wagons for service overseas, the resources of the pool were considerably reduced.

36. Neutral examination of Interchanged Stock.—The staff working under the Director of Wagon Interchange continued to examine wagons interchanged bet-

ween railways at the following junctions :--

Agra East Bank (from 1st June 1941). Agra Cantt. Ajni-Nagpur. Chheoki. East Dock Jn. (from 1st July 1941).

Ghaziabad. Khanalampura. New Delhi. Waltair.

B.—Commercial.

- 37. Alterations in rates and fares.—The year under review saw a radical change in the general rates and fares policy of Indian Railways. Instead of canvassing traffic, Railways were obliged to adopt the general policy of discouraging movement by rail. With this end in view, the usual week-end and holiday concessions and reduced fares admissible to students, boy-scouts, girl-gu des, excursion special trains, etc., were withdrawn. Similarly, cheap rates and fares quoted for passenger, parcels and goods traffic in competition with rival transport services or for developing traffic were mostly cancelled by Railways. Particular attention was paid to restricting the carriage of non-essential commodities and eliminating avoidable long hauls by diverting traffic to shorter routes and by quotation of special rates to prevent re-booking.
- 37.1. Special efforts to secure better Wagon Loads.—The usual practice on railways, when quoting rates lower than the ordinary classified rates. has been to attach suitable minimum weight conditions to these rates. There were, however, a few exceptions to this general practice. For instance, in the case of grains, pulses, and seeds common, reduced rates applied equally to traffic in small lots as well as in wagon loads. While in several other cases, the minimum weights, fixed more in consideration of the peace time requirements of the trade than of operational economy, resulted in poor utilisation of wagon space.

With the rapidly increasing demands for the transport of essential war and supply requirements, it was necessary to eliminate all causes contributing to light loading of wagons. The Indian Railway Conference Association was requested to examine this question very carefully and on their recommendation railways took the following action for ensuring better wagon usage:—

- (a) suitable minimum weight conditions were attached to reduced rates quoted for commodities like grains, pulses and seeds common, etc.. which were not previously subject to any such conditions;
- (b) minimum weight conditions applying to the reduced rates quoted for several commodities were enhanced.

A further step taken in this direction was to impose the usual increased charge of 2 annas per rupce to consignments of food grains moving in small lots. The exemption from the increased charge which consignments of food grains have enjoyed since the inception of the charge, however, continues for traffic moving in full wagon loads.

38. Co-ordination of Rail, Road and Water Transport.—This subject continued to receive the closest attention of the Railways and others concerned. As a result of the recommendation of the Transport Advisory Council, the Provincial Governments set up Boards of Transport comprising among others representatives of important railways for surveying the available transport facilities by rail, road and water, to examine the demands for transport and to advise on actions to be taken for co-ordinating the competitive services.

With a view to enabling the parallel road and river services to function satisfactorily, the Railways withdrew practically all competitive rates and fares and gave every facility for expansion to their peace time rivals.

As examples of co-ordination of rail and water services with a view to relieving rail transport, the following cases are mentioned:—

- () The through traffic formerly carried over the Bengal and North We-tern and Bengal and Assam Railways via Katihar has been diverted to the combined rail-cum-river route by mutual agreement between the Railways and the Joint Steamer Companies.
- (ii) A new co-ordinated rail-river service was set up by the B ng3l and Assam Railway in conjunction with the Bengal River Service Company, Ltd., for the transport of certain descriptions of goods traffic between Calcutta and several river stations of the Bengal River Service Company, Ltd. The traffic is interchanged at Goalundo. Coal traffic both for the public and railway for station: on the Dacca, Chittagong and Surma Valley sections, which was formerly carried by the all rail route via Santahar and Fulchhari is now carried by this co-ordinated service.

modation at Howrah station during rush periods, etc.

39. Closer contact with business interests.—In pursuance of the policy of maintaining close contact with business interests, informal meetings were held in Calcutta and other important centres with representatives of Chambers of Commerce and Trade Associations. The subjects discussed were varied and included such questions as freight charges, changes in the classification of commodities, wagon supplies, facilities for passengers and goods traffic, earlier opening and closing of goods sheds

on account of lighting restrictions, and the procedure for reservation of accom-

- 40. Efforts made by railways to feed war industries.—Authorities interested in the erection of such factories were requested to consult the Railway Department before finally choosing the sites for them. giving details of the areas from which raw products in bulk would be drawn, the source from which coal would be drawn, and the destination of the manufactured products, so that the transport implications could be studied and advice given whether the sites were suitable from the railway point of view:
- 41. Claims for compensation and refunds.—The increased volume of traffic, which has seriously strained the staff at the goodsheds, resulted in increased number of claims received and the amounts paid during the year, with a consequent increase in the number of claims outstanding at the close of the year. Number of applications for refunds of overcharges on goods and parcels also was higher than in the previous year and the time taken for settlement of these claims was slightly more on some railways. The following are some of the details by railways:—

Item No.	Particulars.	B.& A. (A. B.)	B. & N. W.	B. N.		B.& A. (L. B.)		G. L. P.	M. & S. M.	N. S.	N. W.	R. & K.	S, L
	Number of cases involving compensa- tion for goods or parcels lost, damag- ed, or delayed carried over as unsettl- ed at the close of preceding year. Number of claims received (and re-		411	••	1,341	1,337	1,581	905	518	199	1,567	295	609
-	opened) for compensation on account of goods or parcels lost, damaged, or delayed during the current year	1,968	3,751	:-	17,946	9,447	15,594	15,019	7,787	1,384	19,327)1,080 ,11	6,563
3	Balance outstanding as unsettled at the close of the year	230	443		2,461	2,803	1,669	2,015	1,230	460	3,817	205	2,179
4	Average time taken in settlement of claims (Days)	26	82		30	63	33	26	42	91	35	81	68

Railways are, however, taking action to strengthen the staff dealing with claims to expedite settlement of claims.

- 42. Mela Traffic—Kumbh Mela at Prayag' 42.—The Kumbh Mela which occurs at Prayag (Allahabad) once in 12 years, was held during January and February 1942. It was originally intended to make arrangements for the Kumbh Mela on a full scale, but it was subsequently decided by the Government of India to prohibit the carriage by rail of pilgrims intending to proceed to the Mela, as it would have been impossible to cope with such traffic owing to the Railways' commitments in the matter of essential military and civil traffic.
- 42.1. To afford relief to Railways, Provincial Governments and Indian States were asked to reduce or suspend altogether cattle fairs, horse shows and other such functions, which involve the use of rail transport. This request met with a good response.

CHAPTER V

RAILWAY COLLIERIES

43. The output from the principal Railway Collieries during the year 1911-42 compares with the previous year's output as follows:—

		,	Output.			
Colliery.		Owned by	1 (19-11.	1911-42.		
		77	Tons.	Tons.		
i. Bhurkunda		State Railways	. 111,164	_ 143.095		
2. Kargali		Do	631,173	793,593		
3. Kurharbaree and Serampore		Do	661,816	518,279		
4. Joint Bokaro		E. I. & B. N. Railways .	1.001,531	1.093,852		
J. Joint Sawang	٠	Do	50 806	55,451		
6. Jarangdih	٠	B., B. & C. I. and M. & S. M. Railways.	83,913	77,673		
7. Talcher		M. & S. M. Railway .	206,518	220,725		
8. Kurasia	•	B., B. & C. I. Railway .	280,451	304,311		
Total	•	•	3,036,105	3,236,509		

- 44. Tonnage of coal inspected.—The State Railways' Coal Department inspected 8,395,863 tons coal during 1941-42 as compared with 8,120,639 tons in 1940-41.
- 45. Indian Coal Grading Board.—The Department continued to carry out work on behalf of the Indian Coal Grading Board during the year. The amount of cargo coal shipped under the Indian Coal Grading Board to various ports during 1941 was 1,773,624 tons.
- 46. Coal mined in India.—In 1941 the coal mined in the various provinces of British India amounted to 26,088,573 tons as against 26,130,778 tons in 1940, a decrease of 42,205 tons.
- 47. Coal despatched by Rail.—The quantity of coal carried by the East Indian and Bengal Nagpur Railways was as follows:—

48. Coal shipped from Calcutta.—Shipment, incleded uding bunker coal, from the port of Calcutta to Indian and Foreign ports during 1941-42 amounted to 2,092,504 tons as compared with 2,342,385 toned in 1940-41. This includes 140,813 tons of Indian coal shipped to the Ceylon Government Railway.

CHAPTER VI

ROLLING STOCK AND MATERIALS

49. Additions to equipment.—During the year, the following locomotives and rolling stock, including arrears brought forward from previous years, were on order for broad and metre gauge railways:—

Items.			Broad gauge.	Metre gauge.
Locomotives	, ••	••	74	5
Coaching stock	••	••	659	361
Goods stock	#79	••	2,317	673

· New locomotives and rolling stock actually placed on the line during the year as additions or in replacement of condemned stock were as under:—

Items.			Broad gauge.	Metre gauge.
Locomotives	• •	••	8	
Coaching stock	••	••	244	78
Goods stock	• •	••	130	93
	In terms o	of 4-wheel	lers.	

- 49.1. Engines.—The average tractive effort per engine rose from 26,110 lbs in 1940-41 to 26,118 lbs. in 1941-42 on the broad gauge, while that on the metre gauge fell from 14,991 lbs. to 14,846 lbs.
- 50. Construction of locomotives at Ajmer.—Difficulties in the supply of material have caused serious delays to the orders for construction of light broad gauge locomotives in the metre gauge workshops of the Bombay, Baroda and Central India Railway at Ajmer.
- 51. Supply of Rails and fishplates from indigenous sources.—Consequent upon the restrictions on the supply of steel the orders placed with Messrs. The Tata Iron & Steel Co. Ltd. during the year under review amounted only to 36,993 tons of rails and 1,488 tons of fishplates.
- 52. Value of Railway materials purchased.—The value of stores purchased by class I Railways (excluding the Bikaner, Jodhpur, Mysore and H. E. H. the Nizam's State Railways which are mainly or wholly the property of Indian States) decreased from Rs. 17·89 crores in 1940-41 to Rs. 15·60 crores in 1941-42. The value of "indigenous materials" purchased declined by Rs. 152 lakhs and that of 'imported materials' by Rs. 77 lakhs. Heavy decreases occurred under rolling stock (Rs. 137 lakhs) and permanent-way material and track tools (Rs. 122 lakhs). Hardware stores and building materials show increases of Rs. 16 and Rs. 12 lakhs respectively. A summary of the value of stores purchased is given below. The detailed figures in are given in Appendix A pages 240-243, of Volume II of this report.

pn ————————————————————————————————————	Value	of imported m (in lakhs).	atorials	Value of indigenous	Total p (in la	urchasce khs)
Were ask Willow	Purchased direct.	Purchased through agents in India.	Total imported materials.	materials (in lakhs).	1941-42.	1940-41.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
A. Bridge work and its parts, fittings and special fastenings	ار ماری و دو ماری و دو			. 5	5	3
B. Engineering plant and components including all hand and power machi- nery		in the second		2	8	7
C. Workshop machinery. Plant and equipment in- eloding pneumatic machi- nery and tools	2	16	18	. 2	20	21

Particulars.	Value of imported materials (in lakhs).			Value of indicenous	Total partheses (in lakhs).	
	Purchased direct	Purchased through agents in India.	Total imported materials.	materials (in Iskbs).	1941- 1 2	1940-41.
	R9.	Rs.	Rs.	Rs.	Rs.	Rs.
D. Permanent-way material and track tools .	1	2	3	2,20	2,23	3,45
R. Rolling-stock	32	71	1,03	83	1,88	3,23
F. Building materials, water mains, sewage system and track and yard enclosing material and signal and interlocking materials, etc.	1	14	15	50)	65	4:
G. Stores hardware, copper, tin and zine ware, all leather, canvas and India xubber in bulk, metals, painters' stores, tumber and fuel and fuel oil, etc	9	1,59	1,68	4,97	6,6 5	6, 19
H. Electrical and train and locomotive lighting plants and materials, etc., and telegraph and telephone equipment.	4,	48	52	16	63	73
All other stores	2	1,20	1,22	1,98	8,20	3,15
Total .	51	4,36	4,87	10,73	15,60	17,89

52.1. Purchase of wooden sleepers.—The total amount spent on wooden sleepers on Class I railways (excluding Bikaner, Jodhpur, Mysore and H. E. H. the Nizam's State railways) was Rs. •97 crores in 1941-42 as compared with Rs.1•16 crores in 1940-41.

53. In-take of indigenous goods.—The comparative figures for the years 1940-41 and 1941-42 are given below: these include purchases made through the Indian Stores Department and by the Railway Board.

•		Total value of purchases (in lakhs).				
Railways.	Yoar.	Stores imported direct.	Imported stores purchased in India.	Stores of Indian manufacture or of indiacture discussions.	Total.	Percentage of Col. 5 to Col. 6.
1	2	3	4	5	6	7
		Rs.	Rs.	Rs.	Rs.	
State-managed .	1010-41 .	0-80 3-81	3,12·20 2,59 62	7,47·96 6,46·37	10,64·10 9,06·89	70·3 71·3
Company-managed* .	1940-41 . 1941-42 .	76·46 50·57	1,71·77 1,76·03	4,76·58 4,26·68	7,25·11 8,53·25	65·8 65·5
Total	1910-41 .	80 40 51 ·47	4,83·97 4,85·65	12,24-84 10,73-03	17,89·21 15,60·15	68-8 68-8

Bo'h A. B. and B. B. & C. I. Railways have been included under Company-managed Railways for the purpose of comparison though both were taken over by the State from 1st January, 1942.

54. Stores Balances.—The statement below compares the total stores balances at the end of 1941-42 with those at the end of 1940-41.

									<u> </u>	.(Lo	khs of rup	eea).
	!							N.	w.			1
Year.	B. & A. (A. B.)	B. N.	B. B. & C. I.	B. & A. (E. B.)	E. I.	G. I. P.	M. & S. M.	Commer- cial.	Strałegic.	S. I.	Other Rly.	Total,
1940-41 .	40	1,57	93	95	2,27	1,40	56	2,65	35	79	. 62	12,49
1941-42 -	23	1,74	98	1,01	2,26	1,71	64	2,60	20	80	64	12,96

Central Standards Office for Railways.

- 55. Civil Engineering Branch.—During the year under review, the more important designs issued by the Civil Engineering Branch included:—
 - (a) Callender-Hamilton railway bridge material for emergency repairs to bridges,
 - (b) modifications to existing bogie wagons for the transport of Armoured Fighting Vehicles, and
 - (c) a large number of simplified turnout designs for overseas requirements.
- 55.1. Civil Engineering Publications.—New or revised Codes of Practice for (a) Steel Structures, (b) Steel Bridges and (c) Arch Bridges were issued during the year, also a revised edition of the Bridge Rules.
- 56. Mechanical Engineering Branch.—During the year under review, the more important drawing and design work undertaken included—
 - (a) the preparation and issue of 104 new locomotive standard parts drawings;
 - (b) the work in connection with the conversion of metre gauge locomotives to oil burning, and
 - (c) the lashing arrangements for loading Armoured Fighting Vehicles on railway trucks.
- 57. Specification Branch.—War emergency relaxations to eight Indian Railway Standard Specifications were issued.
- 58. Standardisation Committees.—Each of the Bridge, Track, Signalling and Interlocking and Locomotive Standards Committees met once during the year.
- 58.1. The Carriage and Wagon and Electrical Standards Committees and the Standing Committee on Standards and Specifications did not meet during the year.
 - 59. Research and Development.
- 59.1. Civil Engineering Branch.—(a) Organisation.—The Civil Engineering Research Organisation was closed down towards the end of the year as a war emergency measure.
 - (b) Trials.—Trials of various track fittings and tools were continued.
- 59.2. Mechanical Research Branch.—The Dynamometer Car staff carried out a series of experiments to determine the improvement in capacity and economy obtainable from the modernisation of broad gauge B. E. S. A. 4-6-0 type locomotives.

The research organisation undertook a detailed analysis into the incidence and cost of maintenance and repairs to locomotives in certain sheds on the East Indian Railway.

59.3. Oscillation trials of X class pacific type engines.—Oscillation trials were continued with XA, XB, XC and B. E. S. A. 4-6-0 type locomotives on the Bombay, Baroda and Central India, East Indian, and Great Indian Peninsula Railways. These tests served to establish the influence of curved track, super-elevation and engine spring controlled hind trucks on the value of flange forces. As a war emergency measure, this expermental work has been closed.

60. War Branch.—Consequent on Central Standards Office for Railways undertaking responsibility for arrangement for supply of the Defence Department requirements of locomotives and rolling stock for war purposes in India and overseas, a War Section was created in the Central Standards Office from August 1941 to undertake this work.

The demands for locomotives and rolling stock for the Defence Department for overseas included over 200 metre gauge locomotives, 8,300 metre gauge goods wagons, over 1,500 standard gauge (4'—8½") goods wagons, standard gauge and metre gauge ambulance trains and miscellaneous coaching stock and certain narrow gauge locomotives and wagons. Requirements of the Defence Department for India included broad gauge military cars, kitchen cars and broad gauge and metre gauge ambulance trains.

All metre gauge locomotives had to be converted to oil fuel burning prior to despatch and 70 per cent of the metre gauge and standard gauge wagon stock dismantled and packed for shipment in order to conserve shipping space. In addition, wagons had to be strengthened to carry heavy armoured fighting vehicles and much time was devoted to ambulance train and other special vehicle layouts. Drawing office staff were consequently employed largely on war work during the latter part of the year and the organisation of supply and shipment of stock to meet Defence Department's needs, severely taxed the resources of the office and necessitated a curtailment of its normal activities.

CHAPTER VII

STAFF

61. Number of Staff.—The total number of employees (permanent and temporary) on all Indian Railways and in the office of the Railway Board and other offices subordinate thereto (excluding staff employed on construction) at the end of the year 1941-42 was 757,674 as compared with 728,099 at the end of 1940-41. The total route mileage at the end of the year was 40,477. The following table shows the number of employees by communities on the 31st March 1941 and 1942. A similar statement showing details by railways is given as Appendix C-1, pages, 246-247. of Volume II of this report.

						Indians.				٠	ļ ,
Date,	Europeans Hindus other th Depress classe		De- pressed classes.	Muslims	Anglo Indians and Domi- ciled Euro- peans	Sikhs.	Indian Christians	Parsis.	Other commu-	Tofal.	GRAND TOTAL
Sist March 1941*	2,143 1,934	414,105 427,321	107,066 111,572	160,912 172,519	13,239	8,503 8,785	18,758 20,040	1,531 1,558	1,842 [*]	725,950 755,740	728,090 757,674

Norr .- These figures exclude staff on loan from the Indian Audit and Accounts Service

62. Cost of Staff.—The following statement shows the number and cost of all staff, gazetted and non-gazetted, permanent and temporary, open line and construction, employed on Class I Railways during the years 1940-41 and 1941-42. Contractors' labour is not included.

	1		Nu	MBER OF	STAFF O	v 31sr M	AECH.			*		
		0)res list		Co	PRSTRUCTION	אס ,			† COST (OF STATE	
Radway System	Year	Gazet- ted Officers	Non- gazet- ted e n- ployees	TOTAL.	Gazet- ted Officers	Non gazet- ted em- ployece,	ў Тотаі.	Gazetted Officers on Joan from the Indian Audit and Accounts Service	Gazotted Officers	Non gazotted employees.	TOTAL.	Total includ- ing staff on loan from the Indian Audit and Accounts Service.
1	2	3	4	Б	6_	7	8	9	10	11	12	13 '
•									Rs	Rs.	Ra.	Ra,
f	1941	61	16,006	16,967	.,		••		9,83,061	72,99,591	82,82,652	82,82,652
Amam Bengal . {	1942	80	16,336	15,385					6,92,851	71,15,779	78,08,130	78,08,130
r	1941	68	28,367	28,435	1	373	374		11,30,859	79,80,761	91,11,620	91,11,620
Bengal and North Western.	1942	77	28,997	29,074					10,23,887	83,58,132	93,80,019	93,80,019
r	1941;						,		•• (••	••	\.!
BikanerState -{	1942	15	4,697	4,712	٠.,	15	15		1,90,969	14,49,673	15,40,643	18,40,642
" , r	1911	185	70,106	70,291			••		31,34,225	3,57,21,628	3,88,55,853	3,88,65,853
Bengal Nagpuri . {	1912	191	74,505	74,695	••				28,01,241	3,87,19,492	4,15,20,733	4,15,20,733
Bomlay, Baroda	1911	168	66,130	66,298		1	1		31,12,209	3,64,01,604	3,95,13,903	3,95,13,903
and Control India	1913	160	69,810	€9,970		15	15	٠ ا	28,70,310	4,13,78,669	4,40,48,978	4,40,48,978
	1041	123	55,617	55,740				1	21,02,204	2,55,06,068	2,76,98,272	2,77,51,460
Eastern Benval . {	1942	111	59,820	59,931	**		••	1	21,31,821	2,87,67,137	8,03,98,958	8,09,37,749
	1941	252	131,530	134,788		378	378	5	48,60,351	6,24,38,867	6,77,00,218	6,78,93,006
Tast Inian .	1942	235	132,805	133,063		264	182	5	45,78,402	6,73,29,791	17,18,05,193	7,19,13,939
		1	ı İ							}	1	**

^{*} Revise I figures due to changes made by the radway administrations in the figures published last year.

,	-	! 	X 1	то пувил	STAFF ON	Tian Mark	n.					
•			OPEN LINI	۲.) c	overnoci	my.			† COST OF	STAFF.	
Railway Bystom.	Year.	Gazeta ted Officers	Non- gazet- ted em- loyees.	Total	Garet- ted Officers.	Non- Exet- ted em- ployer	Total	Gazetted Officers on loan from the Indian Audit and Accounts Service.	Gazetted Officers.	Non-pare ted	Total	Total in flad- ing staff on loan from the Indian Audit and Account Service.
1	2	3	4	5	6*	7	8	9	10	11	îe	13
				1	ĺ				Re,	R4.	P.s.	Ila.
Great Indian	1941	•204	85,020	*86,124					38,63,580	: : 4 47,79,376	4,96,41,962	4,86,53,771
Poninsula,	1942	210	95,711	93,921		••			37,08,548	5,00,08,441	6,37,17,289	5,57,17,230
	1941	27	8,055	9,082	1	316	377	1	3,29,614	30,71,875	34,04,450	31,35,673
Jodhpur {	1942	27	8,401	8,428		••		1	8,29,517	33,62,255	86,92,773	37,23,338
Madres and South- (1911	131	47,239	{ } 47,373					23,87,914	2,31,51,547	2,59,40,601	2,59,40,501
ern Mahratta.	1942	142	49,288	49,530		••	٠,	٠.,	22,00,571	2,50,68,688	2,72,69,259	2,72,69,259
	1911	31	7,749	7,783		1	1	}	2,10,171	26,74,795	28,81,560	28,51,666
Mysore State	1942	85	8.034	8,069		••		••	2,04,172	27,62,535	29,65,707	29,05,707
Ministration of	1911	67	15,202	15,269	3	112	116		9,28,636	61,27,749	70 56,355	70,58,583
Nizam's State! . {	1942	66	15,727	15,793	2	15	17		8,88,673	65,14,416	74,03,089	74,03,059
North Wortern .	1041	242	•103,799	104,041	2	10	12	5	*43,41 295	{ *5 72,95,852	6,18,56,917	6,17,14,157
f. north women	1943	236	100,123	109,859	••	7	7	4	40,03 903	8,10,50,673	6,50,88,592	6,51,64,847
Bohilkund and {	1941	14	6,270	6,284					1,90,774	17,45,576	19,36,359	19,35,350
Boh'lkund and { Kumaon.	1942	18-	6,287	0,202	••	••			2,05,534	18.09,820	20,15,554	20,15,354
South Indian	1941	121	*39,481	*39,605	,.	1	1		19,15,452	1,68,24,773	1,87,49,225	1,57,49,223
animaranace	1042	712	39,185	20,207		••			17,37,105	1,83,10 605	2.02,47,711	2,02,47,711
lailway Clearing	1981	5	1,19)	1,495	·			1	63 * 7	15,01 595	19,67,832	16,95,272
Accounts Office.	1912	5	1,663	1,668	•••		}	1	62,573	15,88,111	10,40,653	10,71,405
TOTAL .	1911	1,708	£86,867	689,575	7	1,272	1,279	13	2,05,51,978	33,35,09,037	30,33,61,445	703,17,697
Your .	1942††	1,090	720,489	722,179	2	416	418	12	2,71,29,632	35 37,19,218	39,11,49,100	89,14,29,247

Represents revised figures for 1930 41 due to changes made by the railway administrations in the heuro-published last user

A comparison of the figures for 1941-42 with those for the previous year shows that the total number of staff employed on the open lines of State and Company-managed Railways increased by 33,601 during the year, but the number of construction staff decreased by 861 while the number of staff on loan from the Indian Audit and Accounts Service decreased by 1.

The total cost of staff including that of staff on loan from the Indian Audit and Accounts Service increased by Rs. 2.80,57.550 during the year. Increases were recorded both in the numbers and cost of staff on all railways except the East Indian, South Indian and Assam Bengal Railways. On the former two there was a decrease in number with an increase in cost while on the last there was a decrease in number as well as in cost. The general increase in numbers was due to employment of additional staff to cope with the increased traffic. Apart

[†] The figures of cost represent pay, allowances, parages, provident fund contribute n and grate ty.

[‡] It was a class II Railway in 1940-41.

f Excludes figures for collierie . B N. Railna .

TStaff employed on Road and Air Departments in N. S. Railway have been excluded.

tt Includes figure: for Bihaner State Railway.

28 REPORT BY THE RAILWAY BOARD ON INDIAN R VILWAYS FOR 1941-42. [CHAP. VII.

from the cost of the extra staff, the dearness and A. R. P. allowances also contributed to the rise in cost.

The increase in the totals for Class I Railways as a whole, is also due to the inclusion of the Bikaner State Railway as a Class I Railway during this year.

63. Indianisation.

63.1. State-managed Railways.—(i) Direct Recruitment —Superior Services.—23 appointments were made to the Superior Railway Services by direct recruitment. Details are given below:—

(i) Direct recruitment.

			, v.	/CŶNCIE	S FILLEI	э ву			
		· · · ·	*******	I	ndians	**************************************	•		•
		Hır	dus	1	Anglo- Indians				٠.,
Department.	Europeans	Other than Depressed classes	Depressed classes	Muslims.	and Domicil- ed Euro- peans	Sikhs.	Indian Christians	Parsis.	Total
Engineering .		2		1	••			••	, 3
Accounts)	,		;·	••		••	1
Transportation (Traffic) and Commercial.	1	4	• •-	2	; 3	••	, . 1		8
Transportation (Power) and Mechanical En-		3	••	1	٠٠.	••			4
ginedring Other Departments		5		1	••	••		• ··	1 [']
Total .	- I	15	•	5	· 1	••	, 1	••	22

The short recruitment of Europeans was due to the suspension of recruitment in the United Kingdom for the duration of the war. The slight deficiency in the recruitment of Muslims was due to no qualified Muslim being available for the Electrical Engineering Department.

(ii) Promotions.

- (a) Superior Services.—Ten officers were promoted from the Lower Gazetted Service to the Superior Services during the year; of these four were Europeans, three Hindus, one Muslim and two Anglo-Indians or Domiciled Europeans.
- (b) Lower Gazetted Service.—Thirty seven promotions were made to the Lower Gazetted Service in the various Departments. Of these eight were Europeans and twenty-nine Indians. Of the latter fifteen were Hindus, three Muslims, nine Anglo-Indians and Domiciled Europeans, one Sikh and one Jew.
- 63.2. Company-managed Railways.—(i) Direct Recruitment.—Superior Services—The table below gives a summary of direct recruitment made to the Superior Services on Company-managed Railways (excluding His Exalted Highness the Nizam's State, Jodhpur, Bikaner and Mysore State Railways) during the year under review. A detailed statement by individual railways will be found in Appendix C-V (a), pages 268—271, of Volume II of this report.

(i) Direct recruitment.

				rdinns .	4			
	Hine	lue						
Curopeans	Other than Depressed classes.	Depresed classes.	Muslime	Anglo- Indiana and Domiciled Europeana,	Siklis.	Indian Ol rictians,	Parois.	Total
		••	٠.	.,	•••	1		1
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1	23		5	4	1	2	2	37
		than Depressed classes.	than Depressed classes.	than Depressed classes. Muslims classes.	than Depressed classes. Depressed classes. I	than Depressed classes. Depressed classes. Muslims and Europeans. Sikhs. 1	than Depresed classes. Depresed classes. Depresed classes. Muslims and Domiciled Europeans. 1 2 3 3 1 1 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 3 1 3 1 4 1 2 2 1 4 1 2 2 1 5 4 1 2 2 1 5 5 4 1 2 2	than Depressed classes. Depressed classes. Depressed classes. Muslims and Domiciled Europeans. 1 2 3 3 1 2 2 1 1 1 1 1 23 5 4 1 2 2

(ii) Promotions.

Thirty-five officers were promoted from lower ranks to the Superior Services during the year. These comprised thirteen Anglo-Indians or Domiciled Europeans, six Europeans, ten Hindus, two Muslims, three Parsis and one Sikh.

State and Company-managed Railways.

The over-all direct Indian recruitment to Superior Railway Services on the State and Company-managed Railways, taken together, gives percentages as follows:—

-ra							Per cent.
Hindus	• •	• •		• •			64 · 41
Muslims		••					16.95
Anglo-In	dians a	nd Domici	iled Euro	peans		• •	8-47
Sikhs		,	• •				1.70
Indian Cl	hristian	s ·	• •		••	,	5.08
Parsis		<i>,</i>	.:				3.39

The main deficiency in the recruitment of Muslims occurred on Company-managed Railways. i.e., the Bengal & North Western, Bombay, Baroda & Central India and Madras & Southern Mahratta Railways.

64. Review of the progress made since 1934.—The statements on the following pages will throw further light on the progress made in Indianisation and in the recruitment of the various communities both on State-managed and Company-managed Railways since 1934, as reflected in the relative strength of Europeans and Indians belonging to the various communities. Part I relates to superior staff and Part II to subordinate staff on scales of pay rising to Rs. 250 and over.

PART I.

	1	15		Fotal number Rallway (co Plus 33),	12	111 210 210 210 210	870	321 221 221 221 231 4	751	1,621		1942.	1.87	3.41	2.26	2.47	1.27	3.04	0:13	90.0	64-14	60-95	
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1	27.0	1		Pars.e.	등	der .:	=	HH .#9::.	8	33			.5±	8	28	<u> </u>			28	22	9::	3	
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Com	5		Hindur,	Other than Depressed classes.	83	120 88 88 88	329	82278482	ន្ត	583	ties.		State managed Railways Company managed Railways		State managed Railways Company-managed Railways		State-managed Railways Company managed Railways		State-managed Railways Company-managed Railways		State managed Railways Company-managed Railways		the Ir
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H. the Nizam's State, Bikaner, Jodhpur and Mysore State, Statement of subordinates on scales of pay rising to Rs. 250 per mensem and over on Class I Railways (excluding H. E. H. Railways), on the 31st March 1934, 31st March 1934, 31st March 1911 and 31st March PART II.

otal number on the Realway (or lump 24 star 53) esaga 1 995 5535522£ 27.7.5 4.15 \$2.66 \$0.08 62-65 F e. 23.27 52 5; C 55.00 4,113 2,745 6,784 888££ z=25588£ B Josep. 50.0 ** では ¥:33 2.37 Ç 25 2 6.5 ---18312 +×≅e: 2 5 12 엁 Other corum resied. : #22 : 7 : * : 2 연 : : : 18 E 33 £3.65 ii. 3.5 2 9.50 5 13 88 88 S **** Indian Christians 2 2 Z = 16 e e1 = : ** ** : : : **ग्यम्**द् 22022 55 ä 170 31 March Indlans, State runnaed Railway .39 7,977 25,53,20 S asculee hus enall nl-olguh -uH boltolmod er er State-nanged Railways (onprovensnaged Rulleays Frate-mune, ed Relivery a State managed Railways Company-nanaged Relikats State-managed Rallways Company-managed Rallways Total 4600000-E 7. 可以公司 517 Toru 3 Madina i? Depresed classes. :ş, Hundus, CIPRIOL 3,604 1,71. =2885148= 808 :2 김윤류종단 various communities. क्षा वी १ ज्यो १० विश्वसम्बद्ध 818 ៩គូព្លន្ត 500 33 Erdodes Coll'erim' east. Ecropeans, či l'otal number on the Railwey (column 13 12.23). 1.6,720 47,617 egige 0207 2,687 Eggggarg 5 200 382 105,5 25 eeeeeggas, Total 33 Total. Other communities 6 In han Chrestians *** 52 : 38 5 1 ****** 55 of Europeans and Indians Other communi-Parets. :4 :522 . 232 : . : . Ę 15 50 Sikli Pers 2 ಚಪ್ಪತ್ರಗಣ 3 : 20 - 12: 20 -191 163 Indian Christians 31st Varch 1041 ë Indiana 111 28 & E 0 12 E THIS rurador 1,233 Indian --- repolid. # 55 2 8 1 17 5 22882 1,94 ra enathal olyak va enathaliou valistical Parala lacluded to "other communities" in 1924, 8 42542 4~15 34 73 4 200 50 9 senul ull Depresed the sea to sea to seas 2 percentages of the relative strength 3 ,em ;m : :01 : 55 33 33 2,451 31-43 0 0 0 13 170 B 10.80 82 6.03 1,595 85.1 155551 888880 **W** 1913. 12.00 33 and a fio 7 168 명심문간 \$6\$5e-5 659 Sucogeral. Ξ 33.52 53.53 61-14 0.10 0.16 33.11 38.11 5 11.70 15.50 22 ü 1911, 1,629 1 7,939 1924 number on the Railuny (column 2 plus [1], ដូន 2 884.188 814.188 5.200 ဌ 16,237 2,161 5.55 3.53 15. ¥ # # F 13 41.40 85288 3588555 20.07 29.35 21.02 23.52 0.7 Ξ Total :: 1931 Other communi-E :20:-132 2 ಬ ದ wette 8 : Paracs, † :::. : State-managed Railways Company managed Railways Sta's managed Rallways Compone managed Rallways State-manand Rallways Company-managed Railways State-managed Railways Company-managed Railways State-managed Rallways Company-managed Rallways Statement showing the 31st March 1934. -일-일+ :Q : 5 L'alon Christiana. ~~<u>S</u>55 203 TOTAL. Total Total Total Indiana. 153 ##2555 ##255 이끄러~ ; ; ; . S Silhs. 12 hng snathal-olgah Donucilah Lenasgor 2,080 3,241 33585 1,161 Revised figs 400E : 40 370 9888 Ţ. Mediana 303 Depressed Antesto : :::::: ; ::::: Hindus. Other than Deprased thecia 1,00,1 365 604 28882 #58884n8 : Other than Depressed, Ancho fedding and the of the Europeans, Degravand olasers 1,126 7<u>8</u>28828 1,593 197 Europeans. Great Indian Recipinals. North Western Radway Börrel and miscellancous offices. • Arram B nigel

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It will be observed that the Indian element in the superior services has risen from 43:40 per cent. on State-managed and 33:21 per cent. on Company-managed Railways in 1934 to 64:14 per cent. on State-managed and 57:26 per cent. on Company-managed Railways in 1942. Among Indians the percentages by communities in the years 1934 and 1942 were as shown below:—

	State-ma	naged.	Company	-managed.
	Percen	tages	Percent	ages.
,	1934.	1942.	1934.	1942.
Other than depressed classes	25 · 26	37.82	21.63	33.69
Hindus Depressed classes	••		••	
Muslims	6.08	9.31	$2 \cdot 93$	`8-52
Anglo-Indians and Domiciled Euro-	7 • 63	10.23	5.09	7.86
peans. Sikhs	1.54	2.87	. 0.76	1.87
Indian Christians	1.86	2.64	1.02	2.26
Parsis	*	• 1.27	*	2.93
Other Communities	1.03		1.78	0.13

^{*} Parsis were included in "Other communities" in 1934.

Turning to the subordinate staff on scales of pay rising to Rs. 250 per mensem and over, the corresponding figures are as under:—

	State-m	anaged	Company-n	nanaged.
	Percen	tages.	Percent	ages.
	1934.	1942. `	1934.	1942.
Europeans	21.65	11.65	17.76	9.14
$\begin{array}{c} \textbf{Indians-} \\ \textbf{Hindus} & \begin{cases} \textbf{Other than depressed} \\ \textbf{classes.} \\ \textbf{Depressed classes} \end{cases}. \end{array}$	24.92	, 34·28 0·08	26.55	34·71 0·12
Muslims	5-87	8.43	2.82	3.72
Anglo-Indians and Domiciled Europeans.	40-00	37 · 52	44.16	42:75
Sikhs ; .	2.60	3.04	0.88	1.05
Indian Christians	2.65	2-56	. 2.66	3.21
Parsis	. *	1 · 44	*	3.87
Other Communities	2.31	` 1.00	5-17	1.43
Total Indiana	78.35	88.35	82 · 24	90-86

Parsis were included in "Other communities" in 1934.

65. Representation of minority communities in subordinate railway services.—The figures given in Appendix C. V(b), pages 272-273, of Volume' II of this report show by communities, the number and percentage of subordinate staff (excluding inferior servants and labourers), recruited to both permanent and temporary posts on State and Company-managed Railways during the year 1941-42. The following figures show the over-all percentages on State and Company-managed Railways during the seven years ending with 1941-42.

		•		į	1035-34	1936-37	1937-38	1935-39	1939-40	१९५७ना	1941-42
t		(i) (Com	¦ hin	ed percent	age figures	of permane	ent & temp	corary recri	itment.	
Europeana				• !	0.19 -	0.2	0.1	. 0-1	0.2	6.1	0.1
Hindos	•				57-09	54-1	55-0	\$6.0	57-5	86.9	63-1
Muslima					28.50	31.2	20-9	20 0	29.2	28 8	27.5
Angio-India European		d Dọi	miclin	3	8-33	8.7	9.2	7.6	7.5	6-51	3.9
Sikle:	•	•	٠	•	1.70	2-1	2.3	2.2	2.1	2.2	3.2
Indian Chri	rtinan	•	•	•	3.49 -5.5	3.1 \$5.5	2.8 \$5.6	3 1 6.1	3-0 \$5-4	4.3 \$7.1	3.5 6.2
Parsis	•	•		•	0.32	n-3]	0.5	0.5	0.3]	1 0-6]	0.5
Other comm	nniti	o7.			0.38	0.3	0.2	0.3	0.2	102	11-2
					(ii) Perce	entage figur	es of perm	anent recru	citment.		
Buropeans		•		٠	••	0.5	0-4	1 11-3	, (1-2	0-1	9-1
Hindus				٠	• •	65-6	56-0	84-4	58.0	58.7	65.0
Muslima						26.4	20-5	27-1	24.8	23.3	21.6
Anglo-India		l Dot	álcile	3	•	10.7	10-9	10-3	9.5	n a	5-7
Europeun likh	•			:	·	1.2]	1.8	227	1.8]	[1-3]	1.2 }
Indian Chris	tichs		,		•• ,	4.5 6.2	3.6 6.0	4.2 7.3	4.8 7.1	5.0 7.0	5.8 -1.4
Parsis					4.5	0.5	0.6	0.0	0.8	1.0	1.0
Other comm	nnit:	MK'				0.6	0.2	0.6	0.4	0.4	0.8
					(iii) Perc	entage figu	res of temp	orary recre	iitment.	•	
Europeans				٠,	`	,	, 0.1	,	1 0:2	0.1	j 0-1
Hindae					••	53.0	54-4	58·D	87-0	25.\$	60·E
Muelina			: •		•	34.0	31-8	31-4	31.9	31.0	20.0
ingio-India	15 e 50	Dog	nicile	.		7.6	8.3	6-1	6.8	5-4	2.3
Europeans likha			•			2.8)	3.5 7	3.2 }	9-6 7	2.7 3	2.5]
adian Chris	tian=				••	2-1 5-0	2.4 -5.8	3.0 5.5	2.0 4.5	3.5 6.6	2-8 -5-4
Parais	,1	•	•	•		0-1	0.4	0.3	0.1	0.4	0.2
ramus Jither aomm	٠.	•	•	*	••	1 447	נייי ן	, ,,,	[6,1,0]	, v.*)	ر وال

Norm.—Separate figures for permanent and temporary recruitment are not available for 1935-38.

From the figures given above, it will be noticed that during the year under review, the Anglo-Indian community did not obtain its quota of permanent and temporary posts. This was due to qualified members of this community not offering themselves for appointment on railways in adequate numbers. The Muslims also could not secure their full quota of permanent appointments though they obtained more than the percentage prescribed for them in temporary posts. The reasons of their deficiency in the former category were the abnormally high recruitment on Company-managed Railways which have us a group lower percentage reservations for Muslims than State-managed Railways, and the failure of the Assam Bengal, Rohilkund and Kumnon and South Indian Railways to recruit Muslims up to their respective quotas. The State-managed Railways were, however; able to recruit Muslims in excess of their reservations.

In the reports for the previous two years, it was mentioned that Mr. Frank D'Souza, who had been placed on special duty in 1939 to review the working of the rules and orders relating to the representation of minority communities in the services of State-managed Railways, had made a number of recommendations designed in his view to give greater confidence to minority communities. About the close of the year under review, these recommendations were placed before the Central Advisory Council for Railways but orders could not be issued by Government in regard to them during the year.

- 66. Training of Staff.—Area Schools.—The School of Transportation at Chandausi and the Technical School at Jamalpur on the East Indian Railway are continuing their valuable work of training candidates on first appointment and providing refresher courses to staff already in service. The Walton Training School on the North Western Railway has likewise continued its work of affording instructions to recruits and other employees
- 67. Organised labour—All-India Railwaymen's Federation.—The 20th half-yearly meeting between the Railway Board and the All India Railwaymen's Federation was held in Bombay on the 6th August 1941, at which (a) the extension of Provident Fund benefits, (b) the working of the Dearness Allowance Rules, (c) blocks in promotion of lower paid staff, (d) principles to be adopted in regard to staff on the transfer of railways from Company to Statemanagement and (e) grievances of certain Accounts staff, were discussed. There was also a special meeting between the Railway Board and the Federation on the 20th March 1942 at which discussion was confined to certain matters arising out of the war.
- 68. Grain Shops.—The question of setting up grain shops at the larger railway workshop centres for retail sale of food grains to employees at controlled prices was taken up in September 1941 in connection with rising prices. The East Indian and Great Indian Peninsula Railways were the first to make arrangements for such shops and by the end of the year, conditions of scarcity occurring in many parts of the country dictated a wide extension of these grain shops to meet this emergency.
- 69. Dearness Allowance.—It was mentioned in the last year's report that a dearness allowance was granted to Railway employees with effect from September 1940 after consideration of the report of the Court of Enquiry appointed in this connection and in the light of discussions held with the All-India Railwaymen's Federation. The rising trend of prices was maintained throughout the year and it soon became apparent that a revision of the dearness allowance would be necessary. After a further discussion with the All-India Railwaymen's Federation, an increase of 50 per cent. in the allowance was sanctioned from 1st November 1941, the scope of the allowance being also considerably extended. With this increase, the scale of the allowance stood as indicated below at the close of the year:—

Bombay and Calcutta (including suburbs) . Rs 4-8 per mensem to those drawing Rs. 70 per mensem and below.

Cities of 100,000 and over inhabitants (according to 1941 Census) and certain selected areas.

Rs. 3-12 per mensem to those drawing Rs. 60 per mensem and below.

- 70. Railway Staff and the War.—(a) Release of individual officers for technical War work.—During the earlier part of the year the Railway Board continued to spare officers for service in other Departments in connection with the War. Later, however, the pressure of railway work consequent on increased traffic, both military and public, did not permit of the release of officers as freely as before. To meet the requirement for officers, to replace those deputed to other Departments and to provide officers for increased work, a certain number of officers were granted extensions of service and temporary officers were also employed
- extensions of service and temporary officers were also employed

 (b) Release of non-gazetted staff.—Non-gazetted staff, with technical qualifications, continued to be released for service in the Supply and War Departments.
- (c) Labour Training Scheme.—During the year under review, Railways continued their assistance to the scheme organised by the Labour Department for the training of technicians for war service either overseas or in India.
 - (d) Bonus and special pay to certain staff engaged on War work.—
 - (i) The Railway Board sanctioned a bonus at the rate of one day's pay for each completed month of continuous employment, from the 3rd September 1939 to date of cessation of hostilities, in favour of temporary non-gazetted staff employed in railway workshops engaged wholly or in part on munitions production, subject to certain conditions.
 - (ii) The Railway Board have also sanctioned special pay to non-gazetted supervisory staff employed in Mechanical Workshops up to 10 per cent. of pay for each such employee or Rs. 50 per mensem whichever is less if such staff work in excess of an average of 54 hours per week.

CHAPTER VIII

AMENITIES FOR PASSENGERS

71. The railways have had their hands fairly full during the year with the problems arising out of the changed conditions due to war. Inspite of this, however, possibilities of providing certain amenities for passengers, particularly lower class passengers were not overlooked.

72. Introduction of new types of third class carriages.—All new and rebuilt broad gauge and metre gauge lower class stock, totalling 101 carriages, placed in service during the year, conformed to the Railway Board's approved standard.

- 73. Measures taken to ensure security of women passengers.—The safety of women passengers continued to receive the constant attention of Railways. The measures taken include the fitting of internal safety door catches as rolling stock passed through workshops: the provision of extra safety catches and wire gauze window shutters; the fixing of venetian frames to the windows of doors which have safety catches, and of bars to the remaining windows of compartments reserved for women, and the provision of two additional alarm signals which can easily be reached from the lower seats on either side of the compartment.
- 74. Booking offices and out-agencies.—Further booking offices for passengers were arranged (6), new out-agencies were opened (15), new halts were instituted (12), and halts which proved their usefulness to the public (2) were converted to flag stations.

Although the railways have been discouraging non-essential traffic and mention has already been made in paragraph 42 to the efforts made to restrict attendance at the Kumbh Mela, facilities continued to be provided wherever such melas did take place. On the Bengal and North-Western Railway alone 48 temporary booking offices were opened during the year at different places for the convenience of mela passengers.

- 75. Waiting rooms and waiting halls.—Six new upper class waiting rooms and eighteen new third class waiting halls and sheds were opened at different stations. Of these, two upper class and four third class waiting rooms were for women passengers. At one station on the East Indian Railway, the new upper class waiting room was made available for the use of intermediate class passengers also. The policy of making the station precincts more comfortable and hygienic for the passengers was continued and supply of additional benches, installation of additional taps, provision of sanitary fittings in bath rooms, fitting of wire gauze doors to waiting and refreshment rooms, improvement of latrines, etc., was effected at various stations.
- 76. Vendors' stalls in waiting halls and on platforms.—Thirty-two new stalls were opened at different stations. Moreover, strict watch was continued on the maintenance of a good standard of food and service provided by the stalls. They were frequently inspected by officials and disciplinary action taken against vendors whose working was found unsatisfactory. The foodstuffs sold were subjected to chemical analyses from time to time to ensure that the food sold was of wholesome quality. On the East Indian Railway, contractors have been ordered to prepare their foodstuff twice daily to ensure its freshness. On the North Western Railway, inspections of the stalls were also carried out from time to time by non-official members of the Local Advisory Committees.
- 77. Steps taken to make available maximum passenger accommodation in running trains.—With the large reduction in passenger train services, which has been commented upon elsewhere, every effort was made to afford the maximum possible accommodation for passengers within the limited train services that it was found possible to provide. The removal of dining ears from the majority of mail trains permitted the attachment of an additional passenger-carrying vehicle. Widespread publicity was undertaken with the object of discouraging all unnecessary travel, and the importance of travelling as light as possible so as to ensure a greater degree of comfort was stressed. 'Speeds' were subjected to a general reduction which in many cases permitted an increase in the number of passenger-carrying vehicles per train.

APPENDIX A

Officers of the Railway Department (Railway Board) and attached Offices on 31st March 1942.

The Hon ble Mr. S. N. Roy, C.S.I., C.I.E., I.C.S., Member of Council of the Governor General.

Railway Board.

	Sir Leonard Wilson		Chief Commissioner of Railways.
	Mr. T. S. Sankara Aiyar, C.I.E.		Financial Commissioner of Railways.
	Mr. J. H. F. Roper		Member.
	Khan Bahadur Muzaffar Hussain, C.I.	E.	Member.
	Mr. D. Colin Campbell .		Controller of Railway Accounts.
	Mr. S. E. L. West, O.B.E., V.D.	ŧ	Director, Traffic.
	Mr. L. H. Swain		Director, Civil Engineering.
	Col. H. W. Wagstaff, M.C., R.E		Director, Establishment (on leave).
	- ·	٠.	Director, Establishment (Officiating).
	Mr. L. N. Flatt		Director, Mechanical Engineering.
	Mr. I. S. Puri		Director, Finance.
	Mr. J. D. Michael		Secretary.
	Mr. R. V. Ramchandani		Deputy Controller of Railway Accounts.
	Mr. A. K. Basu		Deputy Director, Traffic (Commercial).
	Mr. V. Nilakantan		Deputy Director, Establishment.
	Mr. N. C Watney		Deputy Director, Mechanical Engineering.
	Mr. A. R. Soofi		Deputy Director, Finance.
	Mr. H. M. Jegtiani		Deputy Director, Traffic (War), Tempy.
	Mr. Thomas Kidd		Deputy Director, Mechanical (Stores), Tempy.
	Mr. H. F. Simpson		De puty Director, Traffic (Transportation), Tempy.
	Mr. B. Arora		Deputy Director, Traffic (General), Tempy.
	Mr. L. B. Ramchandani	-	Assistant Director, Finance, Tempy.
,	Mr. H. W. C. C. Smith		Assistant Secretary.
	Mr. J. V. Stuart Edwards		Assistant Director, Engineering, Tempy.
	Mr. W. S. Benton		Officer on Special Duty (A.R.P.) I.
	Mr. M. M. Zubair		Officer on Special Duty (A.R.P.) II.
	Mr. C. T. Venugopal		Officer on Special Duty (B. & N. W. Ry. Purchase).

Attached Offices.

(Central Standards Office.)

Mr. E. Ingoldby		. 1			Chief Controller of Standardization.			
Mr. H. Wood Robinson	ı	٠.			Deputy Chief Controller of Standardization (Civil).			
Mr., T. G. Oreighton		•	•		Deputy Chief Controller of Standardization (Mechanical).			
Mr. F. M. G. Wheeler	•	•	•	•	Assistant Chief Controller of Standardization (Mechanical).			
Mr. S. L. Kumar	:				Assistant Chief Controller of Standardization (Civil).			
Mr. P. R. Aggarwal	٠,	•	•	٠	Assistant Chief Controller of Standardization (Specifications and Records).			
Mr. W. A. Nightingale		٠,			Research Officer.			
Mr. H. Rideau					Dynamometer Car Officer			

